

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V
SUPERFUND DIVISION

DATE:

SUBJECT: Review of Data
Received for Review on: 19 December 2014

FROM: Timothy Prendiville, Supervisor (**SR-6J**)
Superfund Contract Management Section

TO: Data User: Tetra Tech
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Level 3 Data Validation for EDM EXES Reports

We have reviewed the data for the following case:

SITE Name: West Vermont Street Water Contamination (IN)

Case Number: 44903 SDG Number: E5AZ2

Number and Type of Samples: 2 Waters (trace volatiles)

Sample Numbers: E5AZ2, E5AZ3

Laboratory: Shealy Hrs for Review:

Following are our findings:

CC: Howard Pham
Region 5 TPO
Mail Code: **SA-5J**

Below is a summary of the out-of-control audits and the possible effects on the data for this case:

Two (2) preserved water samples labeled E5AZ2 and E5AZ3, were shipped to Shealy Environmental located in West Columbia, SC. All samples were collected on 11/26/14 and received on 12/3/14 intact and properly cooled.

All samples were analyzed for the trace volatile list of compounds. All samples were analyzed according to CLP SOW SOM01.2 (10/2006) and reviewed according to the NFG for SOM01.2 and the SOP for ESAT 5/TechLaw Validation of Contract Laboratory Program Organic Data (Version 2.7).

No samples were designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses. Per the Region, the laboratory QC was canceled for this SDG due to insufficient sample volumes.

No samples were identified as field blanks or field duplicates.

1. HOLDING TIME

No problems were found.

2. GC/MS TUNING AND GC INSTRUMENT PERFORMANCE

No problems were found.

3. CALIBRATION

The following trace volatile samples are associated with a continuing calibration in which a surrogate/DMC exceeded percent difference (%D) criteria. Detected and nondetected compounds are not qualified.

E5AZ2, E5AZ3, VBLKNI, VHBLK01
Vinyl chloride-d3, 1,1-Dichloroethene-d2

4. BLANKS

No problems were found.

5. DEUTERATED MONITORING COMPOUND AND SURROGATE RECOVERY

No problems were found.

6A. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

No samples were designated by the samplers to be used for laboratory QC, i.e. MS/MSD analyses. Per the Region, the laboratory QC was canceled for this SDG due to insufficient sample volumes.

6B. LABORATORY CONTROL SAMPLE

Not applicable to trace volatile analyses.

7. FIELD BLANK AND FIELD DUPLICATE

No samples were identified as field blanks or field duplicates.

8. INTERNAL STANDARDS

No problems were found.

9. COMPOUND IDENTIFICATION

After reviewing the mass spectra and chromatograms it appears that all trace volatile compounds were properly identified.

10. COMPOUND QUANTITATION AND REPORTED DETECTION LIMITS

The following trace volatile samples have analyte concentrations below the quantitation limit (CRQL). Detected compounds are qualified J.

E5AZ2
Trichloroethene, Toluene

E5AZ3
Chloroform, Toluene

A library search indicates a match at or above 85% for a TIC compound in the trace volatile sample. Detected compounds are qualified NJ.

CAS No 67-63-0 Isopropyl alcohol
E5AZ2

A library search indicates a match below 85% for a TIC compound in the trace volatile sample. Detected compounds are qualified J.

Unknown @ 2.60; Unknown @ 2.93
E5AZ2

11. SYSTEM PERFORMANCE

GC/MS baseline indicated acceptable performance.

12. ADDITIONAL INFORMATION

None.

EXES Data Qualifier Sheet

<u>Qualifiers</u>	<u>Data Qualifier Definitions</u>
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
UJ	The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the action limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification.
NJ	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a tentative identification and the associated numerical value represents its approximate concentration.
R	The data are unusable. (The compound may or may not be present.)

Sample Summary Report

Case No:	44903	Contract:	EPW11035	SDG No:	E5AZ2	Lab Code:	SHEALY
Sample Number:	E5AZ2	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	BUJ-0068	pH:	2	Sample Date:	11/26/2014	Sample Time:	10:15:00
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	86		ug/L	86		1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.62		ug/L	0.62		1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	2.9		ug/L	2.9		1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.37	J	ug/L	0.37	J	1.0	Yes	S3VE
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	95		ug/L	95		1.0	Yes	S3VE
Toluene	Target	0.30	J	ug/L	0.30	J	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropyl Alcohol	TIC				7.0	NJ	1.0	Yes	NV

Case No:	44903	Contract:	EPW11035	SDG No:	E5AZ2	Lab Code:	SHEALY
Sample Number:	E5AZ3	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:	BUJ-0069	pH:	2	Sample Date:	11/26/2014	Sample Time:	11:15:00
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.49	J	ug/L	0.49	J	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.21	J	ug/L	0.21	J	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No:	44903	Contract:	EPW11035	SDG No:	E5AZ2	Lab Code:	SHEALY
Sample Number:	VBLKNI	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Case No:	44903	Contract:	EPW11035	SDG No:	E5AZ2	Lab Code:	SHEALY
Sample Number:	VHBLK01	Method:	VOA_Trace	Matrix:	Water	MA Number:	DEFAULT
Sample Location:		pH:		Sample Date:		Sample Time:	
% Moisture :				% Solids :			

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
Dichlorodifluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Vinyl chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromomethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichlorofluoromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloro-1,2,2-trifluoroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Acetone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Carbon disulfide	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl acetate	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylene chloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methyl tert-Butyl Ether	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
cis-1,2-Dichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Butanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Bromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chloroform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,1-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Cyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Carbon tetrachloride	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Benzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Trichloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Methylcyclohexane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromodichloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Analyte Name	Analyte Type	Validation Result	Validation Flag	Units	Lab Result	Lab Flag	Dilution Factor	Reportable	Validation Level
cis-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
4-Methyl-2-pentanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Toluene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
trans-1,3-Dichloropropene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2-Trichloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Tetrachloroethene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
2-Hexanone	Target	5.0	U	ug/L	5.0	U	1.0	Yes	S3VE
Dibromochloromethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromoethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Chlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Ethylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
o-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
m,p-Xylene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Styrene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Bromoform	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
Isopropylbenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,1,2,2-Tetrachloroethane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,3-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,4-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2-Dibromo-3-chloropropane	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,4-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE
1,2,3-Trichlorobenzene	Target	0.50	U	ug/L	0.50	U	1.0	Yes	S3VE

Edit History Report

Case No: 44903

Contract: EPW11035

SDG No: E5AZ2

Lab Code: SHEALY

CAS No.	Compound Name	RT (mins)	Concentration		Lab Qualifier
	Unknown-01	2.60		27 ug/L	J
	Unknown-02	2.93		1.7 ug/L	J
67-63-0	Isopropyl Alcohol	3.15		7.0 ug/L	NJ

LABORATORY NAME Shealy Environmental Services, Inc.

CITY/STATE West Columbia, SC

CASE NO. 44903 SDG NO. E5AZ2

SDG NOS. TO FOLLOW

N/A

MOD. REF. NO. N/A

CONTRACT NO. EP-W-11-035

SOW NO. SOM01.2

All documents delivered in the Complete SDG File (CSF) must be original documents where possible.

	<u>PAGE NOS</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>USEPA</u>
1. <u>Inventory Sheet</u> (Form DC-2) (Do not number)			X	
2. <u>SDG Case Narrative</u>	2	6	X	
3. <u>SDG Cover Sheet/Traffic Report</u>	7	9	X	
4. <u>Trace Volatiles Data</u>				
a. QC Summary				
Deuterated Monitoring Compound Recovery (Form II VOA-1 and VOA-2)	12	14		
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA) (if requested by USEPA Region)	N/A	N/A	X	
Method Blank Summary (Form IV VOA)	15	16	X	
GC/MS Instrument Performance Check (Form V VOA)	17	19	X	
Internal Standard Area and RT Summary (Form VIII VOA)	20	22	X	
b. Sample Data	23	52	X	
TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)			X	
Tentatively Identified Compounds (Form I VOA-TIC)			X	
Reconstructed total ion chromatograms (RIC) for each sample			X	
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			X	
Quantitation reports			X	
Mass Spectra of all reported TICs with three best library matches			X	
c. Standards Data (All Instruments)	53	140		
Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)			X	
RICs and Quantitation Reports for all Standards			X	
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)			X	
RICs and Quantitation Reports for all Standards			X	
d. Raw/Quality Control (QC) Data			X	
BFB	142	148	X	
Blank Data	149	167	X	

CASE NO. <u>44903</u>	SDG NO. <u>E5AZ2</u>	SDG NOS. TO FOLLOW: <u>N/A</u>
MOD. REF. NO. <u>N/A</u>		

	PAGE NOS	CHECK		
	FROM	TO	LAB	USEPA
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
e. Trace SIM Data (Place at the end of the Trace Volatiles Section) [Form I VOA-SIM; Form II VOA-SIM1 and VOA-SIM2; Form IV-VOA-SIM; Form VI VOA-SIM; Form VII VOA-SIM; Form VIII VOA-SIM; and all raw data for QC, Samples, and Standards.]	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>

5. Low/Med Volatiles Data

a. QC Summary

Deuterated Monitoring Compound Recovery (Form II VOA-1, VOA-2, VOA-3, VOA-4)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
Matrix Spike/Matrix Spike Duplicate Recovery (Form III VOA-1 and VOA-2) (if requested by USEPA Region)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
Method Blank Summary (Form IV VOA)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
GC/MS Instrument Performance Check (Form V VOA)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
Internal Standard Area and RT Summary (Form VIII VOA)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>

b. Sample Data

TCL Results - Organics Analysis Data Sheet (Form I VOA-1 and VOA-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
Tentatively Identified Compounds (Form I VOA-TIC)			<u>X</u>	<u> </u>
Reconstructed total ion chromatograms (RIC) for each sample			<u>x</u>	<u> </u>
For each sample:				
Raw Spectra and background-subtracted mass spectra of target compounds identified			<u>X</u>	<u> </u>
Quantitation reports			<u>X</u>	<u> </u>
Mass Spectra of all reported TICs with three best library matches			<u>X</u>	<u> </u>

c. Standards Data (All Instruments)

Initial Calibration Data (Form VI VOA-1, VOA-2, VOA-3)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
RICs and Quantitation Reports for all Standards			<u>X</u>	<u> </u>
Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)			<u>X</u>	<u> </u>
RICs and Quantitation Reports for all Standards			<u>X</u>	<u> </u>

d. Raw/Quality Control (QC) Data

BFB	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>
Blank Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	<u> </u>

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. <u>44903</u>	SDG NO. <u>E5AZ2</u>	SDG NOS. TO FOLLOW: <u>N/A MOD.</u> REF. NO. <u>N/A</u>
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	<u>PAGE NOS</u>	<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>
	<u>USEPA</u>		
Matrix Spike/Matrix Spike Duplicate Data (if requested by USEPA Region)	<u>N/A</u>	<u>N/A</u>	<u>X</u>

6. Semivolatiles Data**a. QC Summary**

Deuterated Monitoring Compound Recovery (Form II SV-1, SV-2, SV-3, SV-4)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III SV-1 and SV-2) (if requested by USEPA Region)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
Method Blank Summary (Form IV SV)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
GC/MS Instrument Performance Check (Form V SV)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
Internal Standard Area and RT Summary (Form VIII SV-1 and SV-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>

b. Sample Data

TCL Results - Organics Analysis Data Sheet (Form I SV-1 and SV-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
Tentatively Identified Compounds (Form I SV-TIC)			<u>X</u>
Reconstructed total ion chromatograms (RICs) for each sample			<u>X</u>
For each sample:			
Raw Spectra and background-subtracted mass spectra of target compounds			<u>X</u>
Quantitation reports			<u>X</u>
Mass Spectra of TICs with three best library matches			<u>X</u>
GPC chromatograms (if GPC is required)			<u>N/A</u>

c. Standards Data (All Instruments)

Initial Calibration Data (Form VI SV-1, SV-2, SV-3)	<u>N/A</u>	<u>N/A</u>	<u>X</u>
RICs and Quantitation Reports for all Standards			<u>X</u>
Continuing Calibration Data (Form VII SV-1, SV-2, SV-3)			<u>X</u>
RICs and Quantitation Reports for all Standards			<u>X</u>

d. Raw QC Data

DFTPP	<u>N/A</u>	<u>N/A</u>	<u>X</u>
Blank Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>
MS/MSD Data (if requested by USEPA Region)	<u>N/A</u>	<u>N/A</u>	<u>X</u>

e. Raw GPC Data

	<u>N/A</u>	<u>N/A</u>	<u>X</u>
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ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. <u>44903</u>	SDG NO. <u>E5AZ2</u>	SDG NOS. TO FOLLOW: <u>N/A</u>
		MOD. REF. NO. <u>N/A</u>

	<u>PAGE NOS</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>USEPA</u>
f. Semivolatile SIM Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
[Form I SV-SIM; Form II SV-SIM1 and SV-SIM2; Form III SV-SIM1 and SV-SIM2 (if required); Form IV SV-SIM; Form VI SV-SIM; Form VII SV-SIM; Form VIII SV-SIM1 and SV-SIM2; and all raw data for QC, Samples, and Standards.]				
7. <u>Pesticides Data</u>				
a. QC Summary				
Surrogate Recovery Summary (Form II PEST-1 and PEST-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Matrix Spike/Matrix Spike Duplicate Recovery Summary (Form III PEST-1 and PEST-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Laboratory Control Sample Recovery (Form III PEST-3 and PEST-4)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Method Blank Summary (Form IV PEST)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
b. Sample Data	<u>N/A</u>	<u>N/A</u>		
TCL Results - Organics Analysis Data Sheet (Form I PEST)			<u>X</u>	
Chromatograms (Primary Column)			<u>X</u>	
Chromatograms from second GC column confirmation			<u>X</u>	
GC Integration report or data system printout			<u>X</u>	
Manual work sheets			<u>X</u>	
For pesticides by GC/MS				
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			<u>X</u>	
c. Standards Data	<u>N/A</u>	<u>N/A</u>		
Initial Calibration of Single Component Analytes (Form VI PEST-1 and PEST-2)			<u>X</u>	
Toxaphene Initial Calibration (Form VI PEST-3 and PEST-4)			<u>X</u>	
Analyte Resolution Summary (Form VI PEST-5, per column)			<u>X</u>	
Performance Evaluation Mixture (Form VI PEST-6)			<u>X</u>	
Individual Standard Mixture A (Form VI PEST-7)			<u>X</u>	
Individual Standard Mixture B (Form VI PEST-8)			<u>X</u>	
Individual Standard Mixture C (Form VI PEST-9 and PEST-10)			<u>X</u>	
Calibration Verification Summary (Form VII PEST-1)			<u>X</u>	
Calibration Verification Summary (Form VII PEST-2)			<u>X</u>	
Calibration Verification Summary (Form VII PEST-3)			<u>X</u>	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. <u>44903</u>	SDG NO. <u>E5AZ2</u>	SDG NOS. TO FOLLOW: <u>N/A</u>
		MOD. REF. NO. <u>N/A</u>

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	<u>FROM</u>	<u>TO</u>	<u>LAB</u>
			<u>USEPA</u>
Calibration Verification Summary (Form VII PEST-4)			<u>X</u>
Analytical Sequence (Form VIII PEST)			<u>X</u>
Florisil Cartridge Check (Form IX PEST-1)			<u>X</u>
Pesticide GPC Calibration (Form IX PEST-2)			<u>X</u>
Identification Summary for Single Component Analytes (Form X PEST-1)			<u>X</u>
Identification Summary for Toxaphene (Form X PEST-2)			<u>X</u>
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights			<u>X</u>

d. Raw QC Data

Blank Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Matrix Spike/Matrix Spike Duplicate Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Laboratory Control Sample Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	

e. Raw GPC Data

e. Raw GPC Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
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f. Raw Florisil Data

f. Raw Florisil Data	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
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8. Aroclor Data

a. QC Summary

Surrogate Recovery Summary (Form II ARO-1 and ARO-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Matrix Spike/Matrix Spike Duplicate Summary (Form III ARO-1 and ARO-2)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Laboratory Control Sample Recovery (Form III ARO-3 and ARO-4)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Method Blank Summary (Form IV ARO)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	

b. Sample Data

TCL Results - Organics Analysis Data Sheet (Form I ARO)	<u>N/A</u>	<u>N/A</u>	<u>X</u>	
Chromatograms (Primary Column)			<u>X</u>	
Chromatograms from second GC column confirmation			<u>X</u>	
GC Integration report or data system printout			<u>X</u>	
Manual work sheets			<u>X</u>	
For Aroclors by GC/MS			<u>X</u>	
Copies of raw spectra and copies of background-subtracted mass spectra of target compounds (samples & standards)			<u>X</u>	

ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

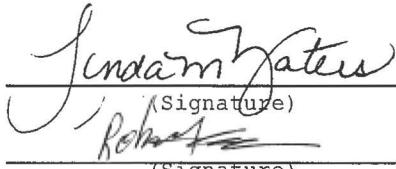
CASE NO. <u>44903</u>	SDG NO. <u>E5AZ2</u>	SDG NOS. TO FOLLOW: <u>N/A</u>
		MOD. REF. NO. <u>N/A</u>

	<u>PAGE NOS</u>		<u>CHECK</u>	
	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>USEPA</u>
c. Standards Data	<u>N/A</u>	<u>N/A</u>		
Aroclors Initial Calibration (Form VI ARO-1, ARO-2, and ARO-3)			x	
Calibration Verification Summary (Form VII ARO-1)			x	
Analytical Sequence (Form VIII ARO)			x	
Identification Summary for Multicomponent Analytes (Form X ARO)			x	
Chromatograms and data system printouts A printout of Retention Times and corresponding peak areas or peak heights			x	
d. Raw QC Data				
Blank Data	<u>N/A</u>	<u>N/A</u>	x	
Matrix Spike/Matrix Spike Duplicate Data	<u>N/A</u>	<u>N/A</u>	x	
Laboratory Control Sample (LCS) Data	<u>N/A</u>	<u>N/A</u>	x	
e. Raw GPC Data (if performed)	<u>N/A</u>	<u>N/A</u>	x	
9. <u>Miscellaneous Data</u>				
Original preparation and analysis forms or copies of preparation and analysis logbook pages	<u>169</u>	<u>176</u>	x	
Internal sample and sample extract transfer chain-of-custody records	<u>177</u>	<u>177</u>	x	
Screening records	<u>N/A</u>		x	
All instrument output, including strip charts from screening activities (describe or list)				
			x	
10. <u>EPA Shipping/Receiving Documents</u>				
Airbills (No. of shipments <u>1</u>)	<u>178</u>	<u>178</u>	x	
Chain of Custody Records	<u>179</u>	<u>179</u>	x	
Sample Tags			x	
Sample Log-in Sheet (Lab & DC-1)	<u>180</u>	<u>180</u>	x	
Miscellaneous Shipping/Receiving Records (describe or list)				

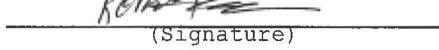
ORGANICS COMPLETE SDG FILE (CSF) INVENTORY SHEET
FORM DC-2 (CON'T)

CASE NO. <u>44903</u>	SDG NO. <u>E5AZZ</u>	SDG NOS. TO FOLLOW: <u>N/A</u>
MOD. REF. NO. <u>N/A</u>		

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	<u>FROM</u>	<u>TO</u>	<u>LAB</u>	<u>USEPA</u>

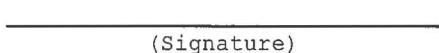
11. Internal Lab Sample Transfer Records and Tracking Sheets (describe or list)N/AN/A12. Other Records (describe or list)E-mail181184X13. CommentsN/AN/AXCompleted by:
(CLP Lab)


Linda Waters
(Signature)

Linda Waters/Data Reviewer
(Printed Name/Title)12/19/2014
(Date)Verified by:
(CLP Lab)


Robert
(Signature)

Robert Zhu/Technical Director

12/19/2014
(Date)Audited by:
(USEPA)


(Signature)

(Printed Name/Title)

(Printed Name/Title)

(Date)

Shealy Environmental Services, Inc.**SOM01.2 SAMPLE DATA PACKAGE****CASE: 44903****SDG: E5AZ2****LAB CODE: SHEALY****CONTRACT #: EPW11035**

The sample data package includes data for all analysis of all samples in this Sample Delivery Group (SDG).

The sample data package consist of the following:

- A. SDG Narrative
- B. SDG Cover Sheet and Traffic Report/Chain of Custody Records
- C. Trace Volatile Data
- D. Trace-sim Volatile Data
- E. Volatile Data
- F. Semivolatile Data
- G. Semivolatile-sim Data
- H. Pesticide Data
- I. Aroclors Data
- J. Herbicide Data
- K. Miscellaneous Data

A. SDG Narrative

Shealy Environmental Services, Inc.

SDG Narrative

12/19/2014

Case 44903

SDG E5AZ2

SOW: SOM01.2

Contract Number: EPW11035

EPA Sample Numbers

EPA Sample Number	Lab Sample ID	TVOA Fraction	DL/RE	pH
E5AZ2	PL03008-001	Yes	No	<2
E5AZ3	PL03008-002	Yes	No	5

Columns	TVOA/TVOA SIM/VOA DB-624, 30m x 0.25mm x 1.4um
VOA Trap	OI #10

TVOA/ TVOA SIM/VOA Equation	$\text{Water sample concentration (ug/L)} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(V_o)}$ $\text{Soil sample concentration (ug/Kg)} = \frac{(A_x)(I_s)(DF)}{(A_{is})(RRF)(W_s)(D)}$ <p>Where</p> <p>A_x is the area of the characteristic ion (EICP) for the compound to be measured.</p> <p>A_{is} is the area of the characteristic ion (EICP) for the internal standard.</p> <p>I_s is the amount of internal standard added, in ng.</p> <p>RRF is the mean relative response factor from the initial calibration.</p> <p>DF is the dilution factor.</p> <p>V_o is total volume of water purged, in mL.</p> <p>W_s is the weight of sample added to the purge tube in g.</p> $D = \frac{100 - \% \text{ moisture}}{100}$
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Sample Receiving

The two (2) water samples in this SDG was received in a sealed shipping container on December 03, 2014. The cooler temperature associated with the samples was 5.3°C.

The temperature was determined using a calibrated Fluke 66 IR thermometer.

TVOA Fraction

Issue: The laboratory received three vials for each of the two samples in this SDG. This Case requires laboratory QC. However the laboratory has insufficient volume to perform laboratory QC, even at a reduced volume as one vial will be used for screening and one vial will be used for the analysis.

Resolution: Per Region 5, the laboratory will forego laboratory QC on these samples. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

The peak eluting at ~6.1min on MSD8 in all analyses is Pentafluorobenzene. This is an internal standard compound that is not being used for quantitation. This compound is not being identified as a TIC.

The peak eluting at ~8.6min on MSD8 in all analyses is an extra DMC in the standard that is not being used for quantitation. This compound is not being identified as a TIC.

See the attached Manual Integration Report for a listing of all manual integrations associated with the samples and standards in this SDG. Unless otherwise noted manual integrations were performed due to incorrect auto integration.

As per the SOW, an example calculation is attached for Vinyl Chloride-d₃ in sample E5AZ2.

I certify that this Sample Data Package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.



Robert Zhu
Technical Director
December 19, 2014

MANUAL INTEGRATION REPORT
VOA TRACE

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

CASE: 44903
SDG: E5AZ2

Example Calculation for the Trace Volatile Fraction

RRF Calculation

$$\text{RRF} = (\text{Ax} * \text{Cis}) / (\text{Ais} * \text{Cx})$$

Where:
 Ax=Area of the characteristic ion (EICP) for the compound to be measured
 Ais=Area of the characteristic ion (EICP) for the specific internal standard
 Cis=Concentration of the internal standard
 Cx=Concentration of the compound to be measured

Example: Vinyl Chloride-d₃ from VSTD005NI

Ax=	21821
Ais=	107183
Cis=	125
Cx=	125

RRF= 0.20359

Mean RRF from ICAL 0.30287

Concentration Calculation

$$\text{Concentration (ug/L)} = (\text{Ax} * \text{Is} * \text{Df}) / (\text{Ais} * \text{RRF} * \text{Vo})$$

Where:
 Ax=Area of the characteristic ion (EICP) for the compound to be measured
 Ais=Area of the characteristic ion (EICP) for the specific internal standard
 Is=Amount of the internal standard added, in nanograms
 Mean RRF=Relative response factor from the Initial calibration standard
 Vo=Total volume of water purged, in milliliters
 Df=Dilution factor

Example: Vinyl Chloride-d₃ from E5AZ2

Ax=	24954
Ais=	102118
Is=	125
Mean RRF=	0.30287
Vo=	25
Df=	1

Concentration (ug/L)= 4.034

B. SDG Cover sheet and Traffic Report/Chain of Custody (TR/COC)

SDG Cover sheet (original)

TR/COCs for all of the samples in the SDG (Copy).



Contract Laboratory Program

Sample Delivery Group (SDG) Cover Sheet

SDG Number	E5AZ2	Case Number	44903	Contract Number	EPW11035
Lab Code	Shealy	SDG Turnaround	21 Days	Delivery CLIN(s)	0045

First Sample Received in SDG	E5AZ2	Last Sample Received in SDG	E5AZ3
First Sample Receipt Date	12/3/2014	Last Sample Receipt Date	12/3/2014

USEPA Sample Numbers in SDG (Listed in Numerical Order)

CLP Sample ID	Sample Type	Requested Analytical CLIN(s)/SubCLIN(s)	Solicitation Number	MA Number(s)
1 E5AZ2	Water	TVOA	N/A	N/A
2 E5AZ3	Water	TVOA	N/A	N/A
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Note: There are a maximum of 20 field samples (excluding PE samples) in an SDG. Attach TR/COC Records to this form in alphanumeric order (the order listed above on this form).

Signature

Date

ESAZZ

USEPA

DateShipped: 12/2/2014
CarrierName: FedEx
AirbillNo: 89992700288620

CHAIN OF CUSTODY RECORD

West Vermont

Contact Name: Kevin Scott
Contact Phone: 312-201-7739

SAMPLES TRANSFERRED FROM _____
CHAIN OF CUSTODY # _____

Special Instructions:

Kelly M.

12-3-14/1080 OK

$$T = 5.3^\circ$$

Shealy Environmental Services, Inc.

SOM01.2 SAMPLE DATA PACKAGE

LAB CODE: SHEALY

CONTRACT #: EPW11035

C. Trace Volatiles Data

- 1. Trace Volatiles QC Summary**
- 2. Trace Volatiles Sample Data**
- 3. Trace Volatiles Standards Data**
- 4. Trace Volatiles Raw QC Data**

1. QC Summary

- a. Deuterated Monitoring Compound (DMC)
Recovery
(Form II VOA)
- b. Method Blank Summary
(Form IV VOA)
- c. GC/MS Instrument Performance Check
(Form V VOA)
- d. Internal Standard Area and RT Summary
(Form VIII VOA)

a. Deuterated Monitoring Compound (DMC)
Recovery (Form II VOA)

2A - FORM II VOA-1
WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC1 (VCL) #	VDMC2 (CLA) #	VDMC3 (DCE) #	VDMC4 (BUT) #	VDMC5 (CLF) #	VDMC6 (DCA) #	VDMC7 (BEN) #
01	VBLKNI	110	109	76	95	99	94	105
02	E5AZ2	81	88	60	81	85	90	82
03	E5AZ3	79	86	60	84	83	90	79
04	VHBLK01	100	101	71	78	90	90	94
05								
06								
07								
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09								
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QC LIMITS

VDMC1 (VCL) = Vinyl chloride-d ₃	(65-131)
VDMC2 (CLA) = Chloroethane-d ₅	(71-131)
VDMC3 (DCE) = 1,1-Dichloroethene-d ₂	(55-104)
VDMC4 (BUT) = 2-Butanone-d ₅	(49-155)
VDMC5 (CLF) = Chloroform-d	(78-121)
VDMC6 (DCA) = 1,2-Dichloroethane-d ₄	(78-129)
VDMC7 (BEN) = Benzene-d ₆	(77-124)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B - FORM II VOA-2
 WATER VOLATILE DEUTERATED MONITORING COMPOUND RECOVERY

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: SDG No.: E5AZ2

Level: (TRACE or LOW) TRACE

	EPA SAMPLE NO.	VDMC8 (DPA) #	VDMC9 (TOL) #	VDMC10 (TDP) #	VDMC11 (HEX) #	VDMC12 (DXE) #	VDMC13 (TCA) #	VDMC14 (DCZ) #	TOT
01	VBLKNI	100	101	96	91		102	99	0
02	E5AZ2	86	86	97	85		93	88	0
03	E5AZ3	82	84	95	88		91	88	0
04	VHBLK01	95	93	96	83		99	99	0
05									
06									
07									
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QC LIMITS

VDMC8 (DPA) = 1,2-Dichloropropane-d ₆	(79-124)
VDMC9 (TOL) = Toluene-d ₈	(77-121)
VDMC10 (TDP) = trans-1,3-Dichloropropene-d ₄	(73-121)
VDMC11 (HEX) = 2-Hexanone-d ₅	(28-135)
VDMC12 (DXE) = 1,4-Dioxane-d ₈	(50-150)
VDMC13 (TCA) = 1,1,2,2-Tetrachloroethane-d ₂	(73-125)
VDMC14 (DCZ) = 1,2-Dichlorobenzene-d ₄	(80-131)

Column to be used to flag recovery values

* Values outside of contract required QC limits

Report 1,4-Dioxane-d₈ for Low-Medium VOA analysis only

**b. Method Blank Summary
(Form IV VOA)**

Arrange in chronological order by date of analysis of the blanks and by instrument.

4A - FORM IV VOA
VOLATILE METHOD BLANK SUMMARY

VBLKNI

Lab Name: Shealy Environmental Services, Inc.Contract: EP-W-11-035Lab Code: SHEALY Case No.: 44903Mod. Ref No.: _____ SDG No.: E5AZ2Lab File ID: 81204A05Lab Sample ID: PQ62321-001Instrument ID: MSD8Matrix: (SOIL/SED/WATER) WaterDate Analyzed: 12/04/2014Level: (TRACE or LOW/MED) TRACETime Analyzed: 1102GC Column: DB-624 ID: 0.25 (mm)Heated Purge: (Y/N) N

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	<u>E5AZ2</u>	<u>PL03008-001</u>	<u>81204A06</u>	<u>1140</u>
02	<u>E5AZ3</u>	<u>PL03008-002</u>	<u>81204A07</u>	<u>1209</u>
03	<u>VHBLK01</u>	<u>PL03008-003</u>	<u>81204A18</u>	<u>1719</u>
04				
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COMMENTS: _____

**c. GC/MS Instrument Performance Check
(Form V VOA)**

Arrange in chronological order, by instrument.

5A - FORM V VOA
 VOLATILE ORGANIC INSTRUMENT
 PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

BFBMV

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Lab File ID: 81202D01

BFB Injection Date: 12/02/2014

Instrument ID: MSD8

BFB Injection Time: 2335

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.9
75	30.0 - 80.0% of mass 95	49.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.3 (0.3) 1
174	50.0 - 120% of mass 95	84.2
175	5.0 - 9.0% of mass 174	6.1 (7.2) 1
176	95.0 - 101% of mass 174	81.3 (96.6) 1
177	5.0 - 9.0% of mass 176	5.4 (6.6) 2

1-Value is %mass 174

2-Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD020MV	VSTD020MV	81202D02	12/03/2014	0000
02	VSTD010MV	VSTD010MV	81202D03	12/03/2014	0028
03	VSTD005MV	VSTD005MV	81202D04	12/03/2014	0056
04	VSTD001MV	VSTD001MV	81202D05	12/03/2014	0125
05	VSTD0.5MV	VSTD0.5MV	81202D06	12/03/2014	0153
06					
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5A - FORM V VOA
 VOLATILE ORGANIC INSTRUMENT
 PERFORMANCE CHECK
 BROMOFLUOROBENZENE (BFB)

BFBNI

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Lab File ID: 81204A01

BFB Injection Date: 12/04/2014

Instrument ID: MSD8

BFB Injection Time: 0906

GC Column: DB-624 ID: 0.25 (mm)

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.5
75	30.0 - 80.0% of mass 95	46.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.7
173	Less than 2.0% of mass 174	0.5 (0.7) 1
174	50.0 - 120% of mass 95	82.0
175	5.0 - 9.0% of mass 174	6.3 (7.7) 1
176	95.0 - 101% of mass 174	80.4 (98.1) 1
177	5.0 - 9.0% of mass 176	5.5 (6.9) 2

1-Value is %mass 174

2-Value is %mass 176

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005NI	VSTD005NI	81204A04	12/04/2014	1028
02	VBLKNI	PQ62321-001	81204A05	12/04/2014	1102
03	E5AZ2	PL03008-001	81204A06	12/04/2014	1140
04	E5AZ3	PL03008-002	81204A07	12/04/2014	1209
05	VHBLK01	PL03008-003	81204A18	12/04/2014	1719
06	VSTD005NL	VSTD005NL	81204A20	12/04/2014	1815
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22					

**d. Internal Standard Area and RT
Summary (Form VIII VOA)**

Arrange in chronological order, by instrument.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035
 Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/03/2014 12/03/2014
 EPA Sample No. (VSTD#####): VSTD005NI Date Analyzed: 12/04/2014
 Lab File ID (Standard): 81204A04 Time Analyzed: 1028
 Instrument ID: MSD8 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	79380	10.490	107183	6.810	36207	12.510
UPPER LIMIT	111132	10.819	150057	7.139	50690	12.842
LOWER LIMIT	47628	10.159	64310	6.479	21725	12.182
EPA SAMPLE NO.						
01 VBLKNI	65790	10.490	95559	6.810	29625	12.51
02 E5AZ2	76536	10.490	102118	6.810	33975	12.51
03 E5AZ3	79698	10.490	101432	6.810	33494	12.51
04 VHBLK01	70476	10.490	98169	6.810	29298	12.51
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22						

IS1 (CBZ) = Chlorobenzene-d₅

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d₄

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

8A - FORM VIII VOA
VOLATILE INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035
 Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2
 GC Column: DB-624 ID: 0.25 (mm) Init. Calib. Date(s): 12/03/2014 12/03/2014
 EPA Sample No. (VSTD#####): VSTD005NL Date Analyzed: 12/04/2014
 Lab File ID (Standard): 81204A20 Time Analyzed: 1815
 Instrument ID: MSD8 Heated Purge: (Y/N) N

	IS1 (CBZ) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (DCB) AREA #	RT #
12 HOUR STD	74224	10.490	100695	6.810	36061	12.510
UPPER LIMIT	103914	10.819	140973	7.139	50486	12.842
LOWER LIMIT	44535	10.159	60417	6.479	21637	12.182
EPA SAMPLE NO.						
01 VBLKNI	65790	10.490	95559	6.810	29625	12.51
02 E5AZ2	76536	10.490	102118	6.810	33975	12.51
03 E5AZ3	79698	10.490	101432	6.810	33494	12.51
04 VHBLK01	70476	10.490	98169	6.810	29298	12.51
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19						
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21						
22						

IS1 (CBZ) = Chlorobenzene-d₅

IS2 (DFB) = 1,4-Difluorobenzene

IS3 (DCB) = 1,4-Dichlorobenzene-d₄

AREA UPPER LIMIT = 200% (Low-Medium Volatiles) and 140% (Trace Volatiles) of internal standard area

AREA LOWER LIMIT = 50% (Low-Medium Volatiles) and 60% (Trace Volatiles) of internal standard area

RT UPPER LIMIT = + 0.50 (Low-Medium Volatiles) and + 0.33 (Trace Volatiles) minutes of internal standard RT

RT LOWER LIMIT = - 0.50 (Low-Medium Volatiles) and - 0.33 (Trace Volatiles) minutes of internal standard RT

Column used to flag values outside contract required QC limits with an asterisk.

2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I, VOA-1, VOA-2 and Form I VOA-TIC), followed by the raw data for volatile samples. These sample packets shall be placed in increasing EPA Sample ID number order, considering both letters and numbers.

- a. Target Compound Results
(Form I, VOA-1, VOA-2)
- b. Tentatively Identified Compounds (Form I VOA-TIC)
Lists up to 30 TICs
- c. Quantitation Report showing calculations for TCL analytes
- d. Quantitation Report showing calculations for TICs
- e. Reconstructed Total Ion Chromatograms
- f. Copies of raw spectra and copies of background-subtracted mass spectra of TCL analytes identified in the sample.
- g. Copies of mass spectra of organic compounds not listed in Exhibit C with associated best-match spectra.
- h. Printout of Manual Integrations

Spectra shall be labeled as follows: EPA Sample ID number, lab file ID, date and time of analysis, and instrument ID. The compound name must be clearly marked.

E5AZ2

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-001

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A06

Level: (TRACE/LOW/MED) TRACE

Date Received: 12/03/2014

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	86	
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.62	
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	2.9	
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

E5AZ2

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-001

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A06

Level: (TRACE/LOW/MED) TRACE

Date Received: 12/03/2014

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.37	J
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	95	
108-88-3	Toluene	0.30	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

E5AZ2

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035
 Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2
 Matrix: (SOIL/SED/WATER) Water Lab Sample ID: PL03008-001
 Sample wt/vol: 25.0 (g/mL) mL Lab File ID: 81204A06
 Level: (TRACE or LOW/MED) TRACE Date Received: 12/03/2014
 % Moisture: not dec. Date Analyzed: 12/04/2014
 GC Column: DB-624 ID: 0.25 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)
 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01	Unknown-01	2.600	27	J
02	Unknown-02	2.930	1.7	J
03 67-63-0	Isopropyl Alcohol	3.150	7.0	NJ
04				
05				
06				
07				
08				
09				
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27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A06.D
 Lab Sample ID: PL03008-001 Client Sample ID: E5AZ2
 Injection Date: 04-Dec-2014 11:40:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-001
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 6
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Data Reviewer: all

Detector: MS Scan

Review Date: 05-Dec-2014 08:08:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
1 Dichlorodifluoromethane	85.0		1.579		ND			
2 Chloromethane	50.0		1.721		ND			
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	24954	4.0342	4.0341	
4 Vinyl Chloride	62.0		1.827		ND			
5 Bromomethane	94.0		2.135		ND			
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	16161	4.4175	4.4174	
7 Chloroethane	64.0		2.218		ND			
8 Trichlorofluoromethane	101.0		2.466		ND			
\$ 12 1,1-Dichloroethene-d2	63.0	2.964	2.964	-0.011	37577	2.9867	2.9867	
13 1,1-Dichloroethene	96.0		2.987		ND			
11 1,1,2-Trichloro-1,2,2-trifluo	101.0		2.987		ND			
14 Acetone	43.0	3.011	3.011	0.000	41109	85.556	85.556	
15 Carbon Disulfide	76.0		3.236		ND			
16 Methyl Acetate	43.0		3.401		ND			
17 Methylene Chloride	84.0	3.532	3.532	0.001	3809	0.62074	0.62070	
20 Methyl tert-Butyl Ether	73.0		3.875		ND			
21 trans-1,2-Dichloroethene	96.0		3.875		ND			
23 1,1-Dichloroethane	63.0		4.407		ND			
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	34398	40.308	40.308	
26 cis-1,2-Dichloroethene	96.0		5.152		ND			
28 2-Butanone	43.0		5.164		ND			
29 Bromochloromethane	128.0		5.460		ND			
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	48339	4.2746	4.2746	
31 Chloroform	83.0	5.567	5.567	0.000	33113	2.8803	2.8803	
33 1,1,1-Trichloroethane	97.0		5.815		ND			
32 Cyclohexane	56.0		5.886		ND			
34 Carbon Tetrachloride	117.0		6.028		ND			

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.001	18977	4.5085	4.5084	
\$ 36 Benzene-d6	84.0	6.253	6.253	0.012	101644	4.1037	4.1037	
37 Benzene	78.0		6.300		ND			
39 1,2-Dichloroethane	62.0		6.324		ND			
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	102118	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	2690	0.37176	0.37170	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	29611	4.2810	4.2809	
43 Methylcyclohexane	83.0		7.413		ND			
45 1,2-Dichloropropane	63.0		7.448		ND			
49 Bromodichloromethane	83.0		7.815		ND			
50 cis-1,3-Dichloropropene	75.0		8.383		ND			
51 4-Methyl-2-pentanone	43.0	8.655	8.655	0.012	141532	95.321	95.321	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	85799	4.3163	4.3163	
53 Toluene	91.0	8.892	8.892	0.012	7263	0.29738	0.29730	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	17850	4.8611	4.8610	
55 trans-1,3-Dichloropropene	75.0		9.188		ND			
56 1,1,2-Trichloroethane	97.0		9.412		ND			
57 Tetrachloroethene	164.0		9.590		ND			
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	21489	42.561	42.561	
60 2-Hexanone	43.0		9.732		ND			
61 Dibromochloromethane	129.0		9.874		ND			
62 1,2-Dibromoethane	107.0		9.992		ND			
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	76536	5.0000	5.0000	
64 Chlorobenzene	112.0		10.525		ND			
65 Ethylbenzene	91.0		10.631		ND			
67 m+p-Xylenes	106.0		10.749		ND			
68 o-Xylene	106.0		11.116		ND			
69 Styrene	104.0		11.128		ND			
70 Bromoform	173.0		11.294		ND			
71 Isopropylbenzene	105.0		11.448		ND			
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	11051	4.6337	4.6336	
74 1,1,2,2-Tetrachloroethane	83.0		11.708		ND			
83 1,3-Dichlorobenzene	146.0		12.465		ND			
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	33975	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0		12.536		ND			
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	23460	4.3769	4.3769	
89 1,2-Dichlorobenzene	146.0		12.808		ND			
90 1,2-Dibromo-3-chloropropane	75.0		13.365		ND			
91 1,2,4-Trichlorobenzene	180.0		13.944		ND			
94 1,2,3-Trichlorobenzene	180.0		13.944		ND			

QC Flag Legend

Review Flags

ND - User Disabled Compound Identification

Shealy Environmental Services, Inc.

Tentatively Identified Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A06.D
 Lab Sample ID: PL03008-001 Client Sample ID: E5AZ2
 Injection Date: 04-Dec-2014 11:40:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-001
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 6
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:08:30

Tentative Identified Compound Results

RT	Response	Amount ug/L	Final Conc ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight
Unknown								
2.597	1252051	26.654	26.654	41				
Unknown								
2.928	79387	1.6900	1.6900	41				
67-63-0	Isopropyl Alcohol							
3.153	327797	6.9782	6.9782	41	86	294	C3H8O	60

Quant. Compounds	RT	Response	Amount ug/L
* 41 1,4-Difluorobenzene	6.809	234873	5.0000

Shealy Environmental Services, Inc.

Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A06.D
 Lab Sample ID: PL03008-001 Client Sample ID: E5AZ2
 Injection Date: 04-Dec-2014 11:40:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-001
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 6
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ccv Sample: /chem/msd8.i/8120414.b/81204A04.D
 Sample Type: VSTD005NI Sublist: std.sub
 Inject. Date: 04-Dec-2014 10:28:30 Cal Amount: 5.0000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	107183	64310	150056	102118	95.3
* 63 Chlorobenzene-d5	79380	47628	111132	76536	96.4
* 85 1,4-Dichlorobenzene-d4	36207	21725	50689	33975	93.8

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	0.002
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0.001
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0.001

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

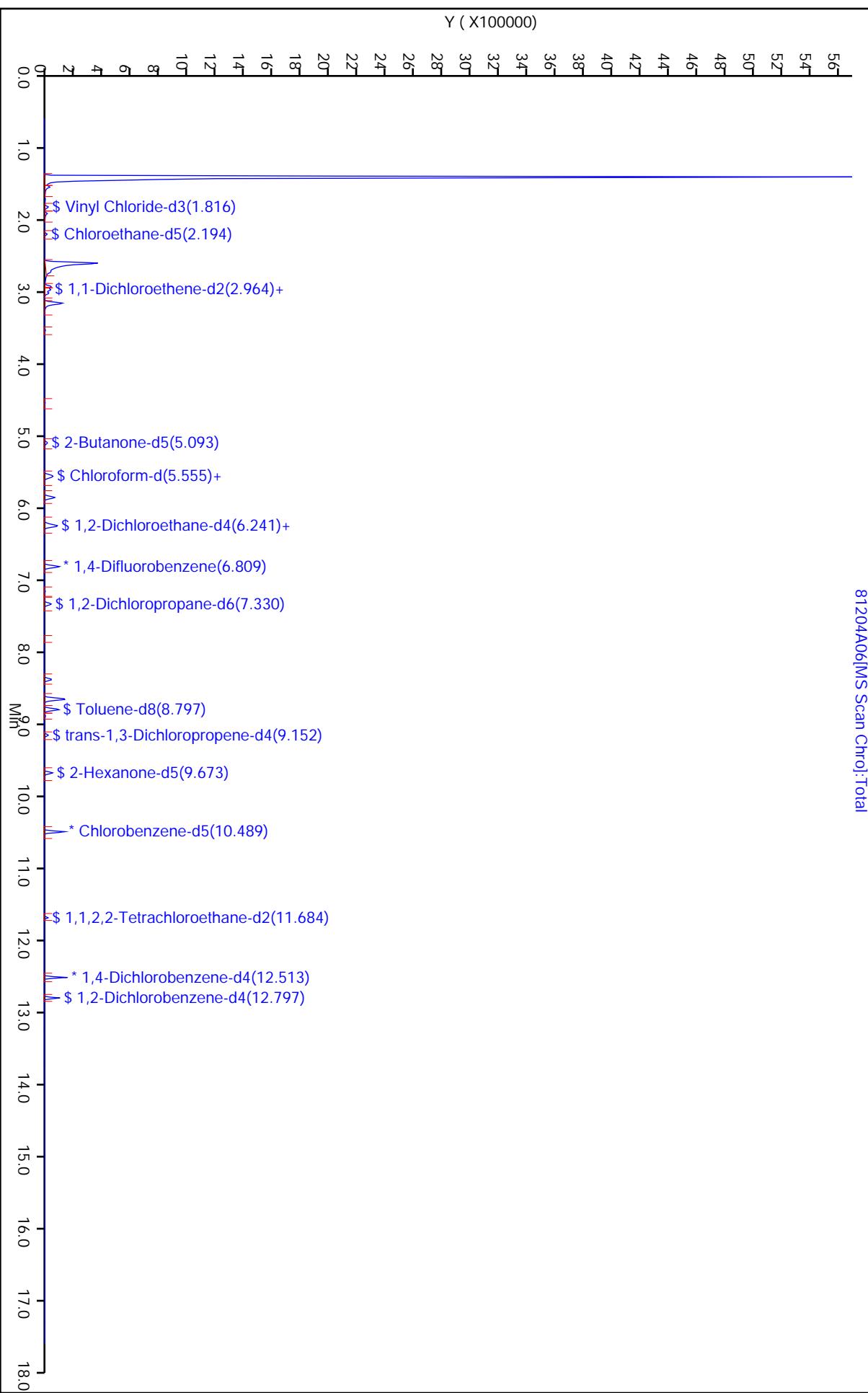
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A06.D
 Lab Sample ID: PL03008-001 Client Sample ID: E5AZ2
 Injection Date: 04-Dec-2014 11:40:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-001
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 6
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	4.0341	80.7	65- 131
\$ 6 Chloroethane-d5	5	4.4174	88.3	71- 131
\$ 12 1,1-Dichloroethene-d2	5	2.9867	59.7	55- 104
\$ 25 2-Butanone-d5	50	40.308	80.6	49- 155
\$ 30 Chloroform-d	5	4.2746	85.5	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.5084	90.2	78- 129
\$ 36 Benzene-d6	5	4.1037	82.1	77- 124
\$ 44 1,2-Dichloropropane-d6	5	4.2809	85.6	79- 124
\$ 52 Toluene-d8	5	4.3163	86.3	77- 121
\$ 54 trans-1,3-Dichloropropen	5	4.861	97.2	73- 121
\$ 58 2-Hexanone-d5	50	42.561	85.1	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	4.6336	92.7	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.3769	87.5	80- 131



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

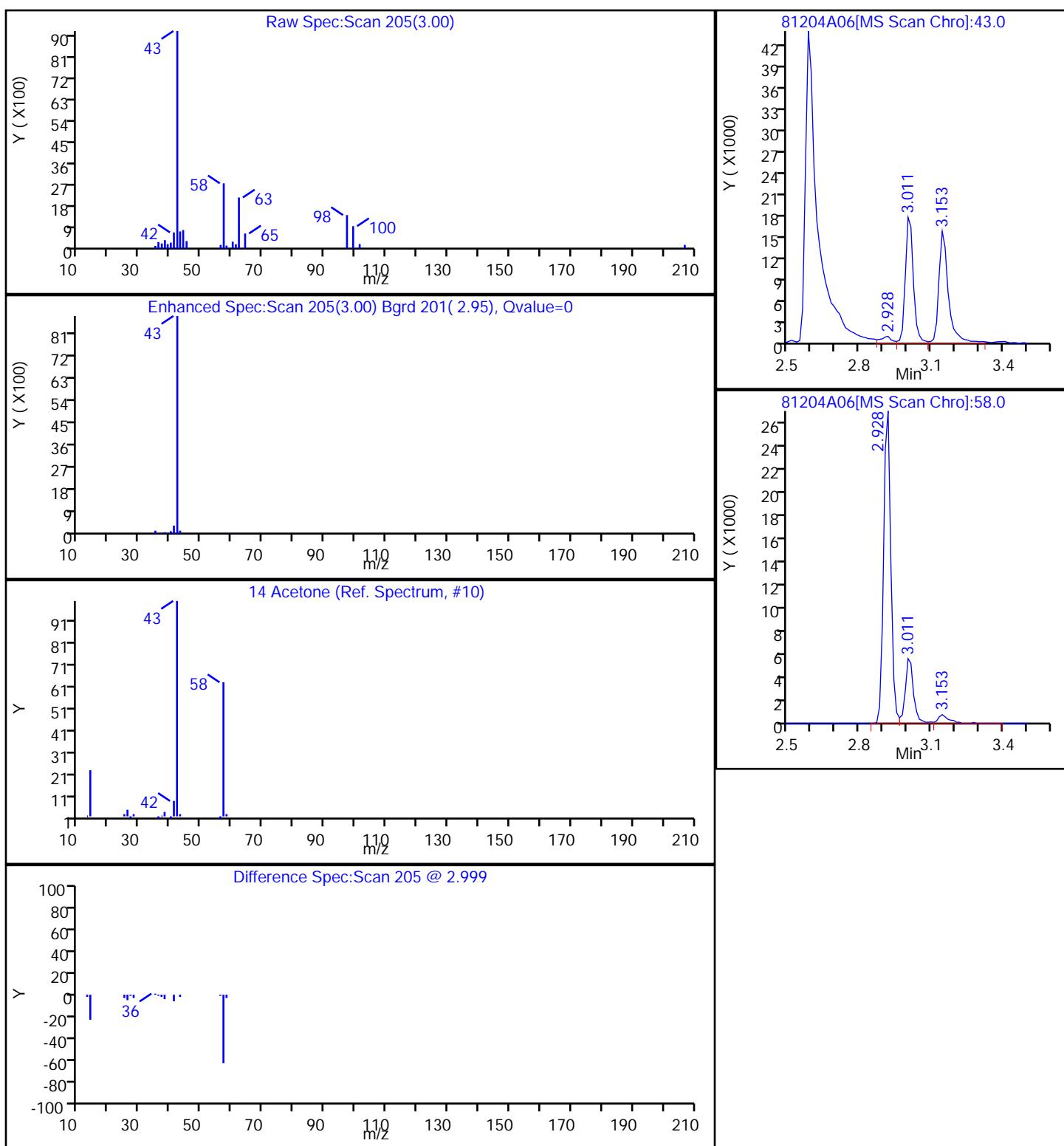
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

14 Acetone



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

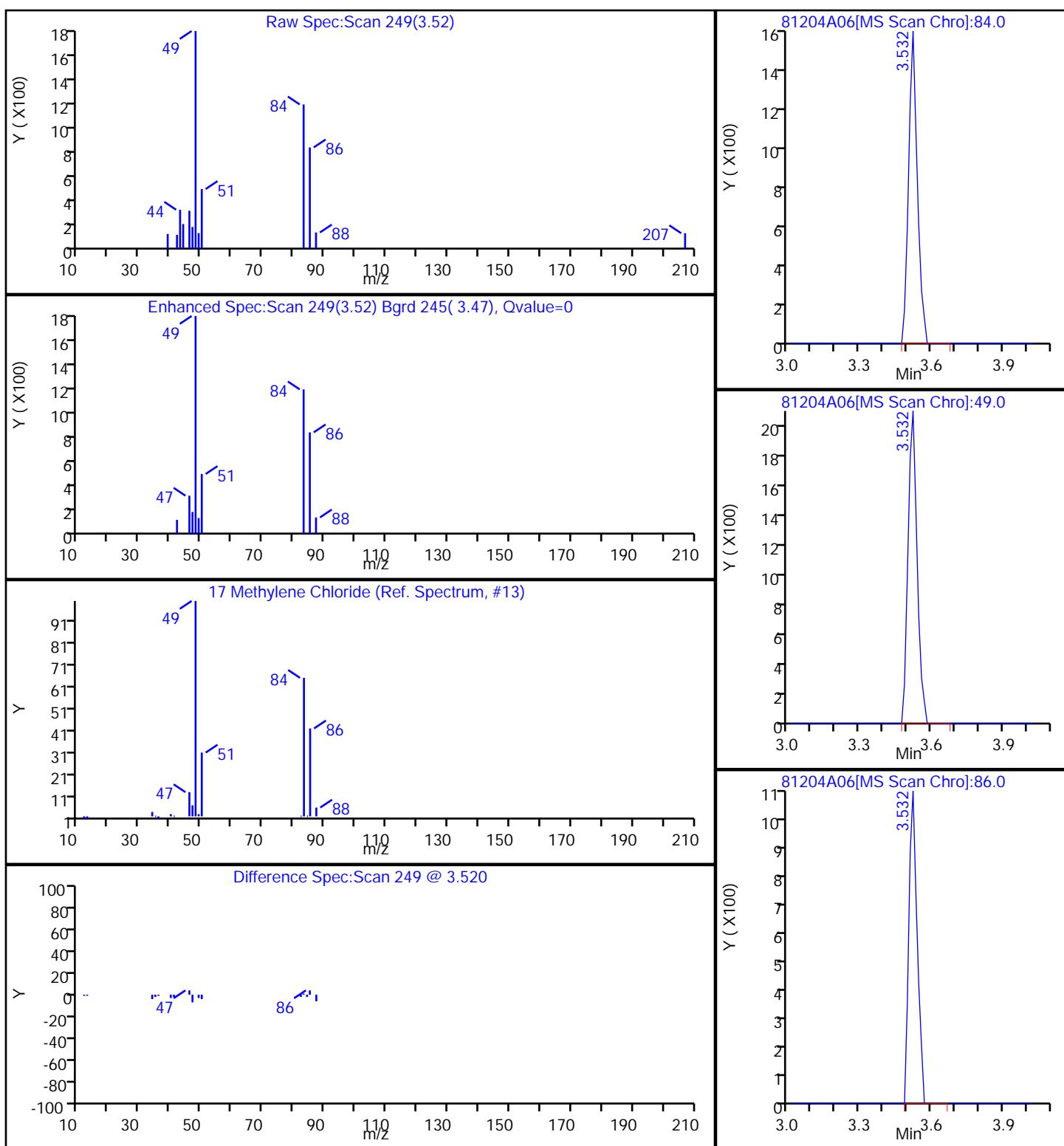
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

17 Methylene Chloride



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

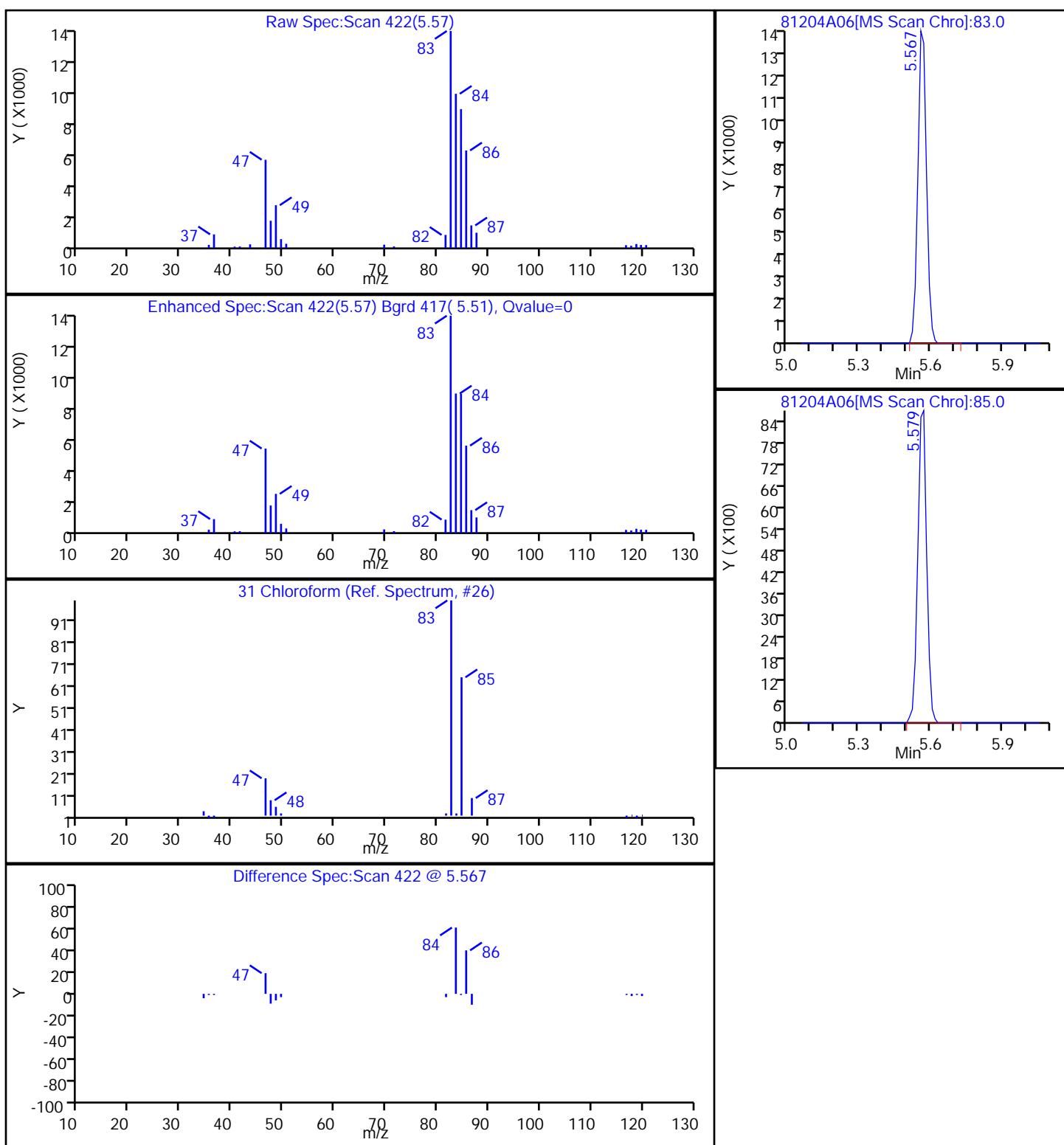
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

31 Chloroform



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

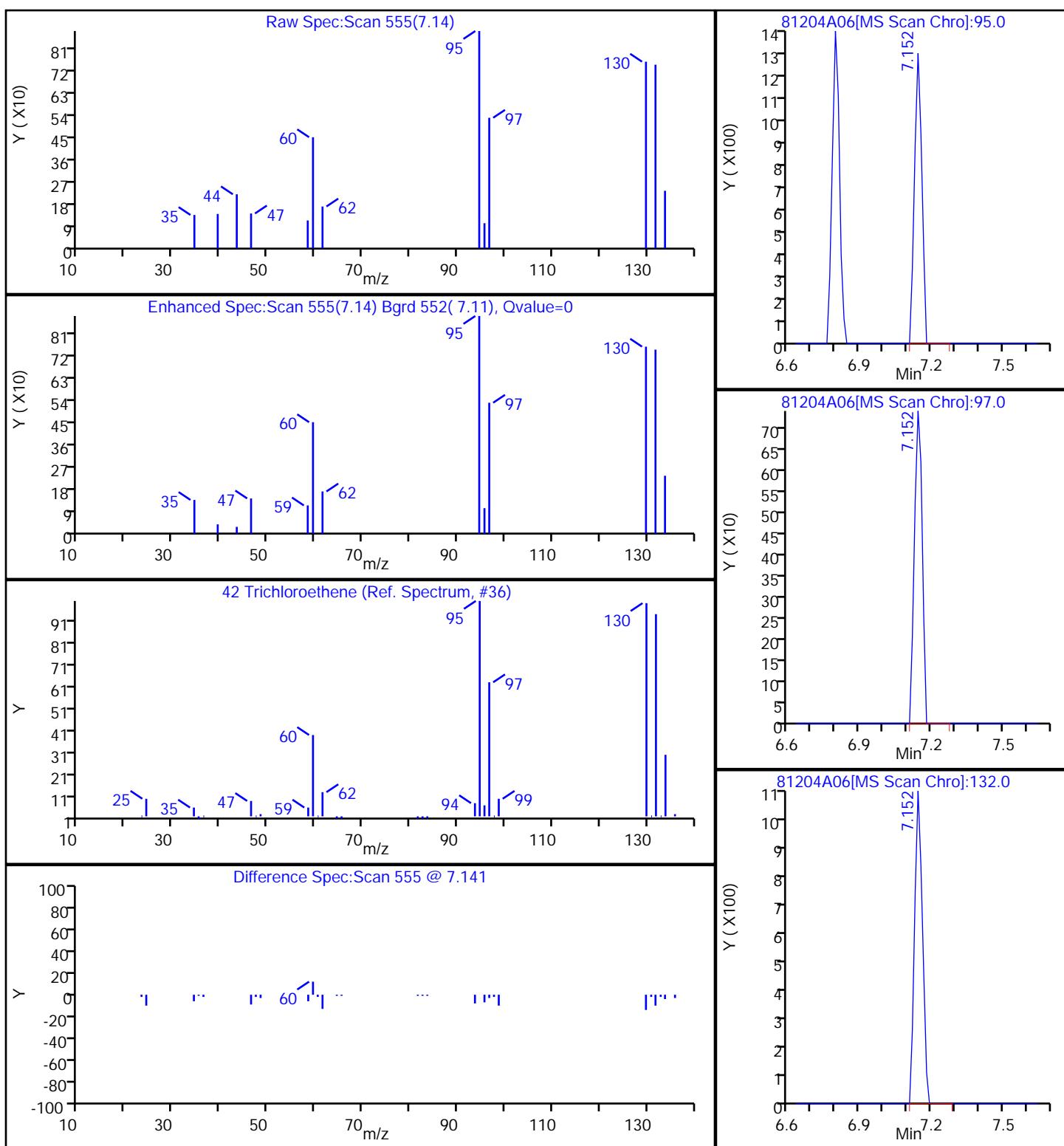
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

42 Trichloroethene



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

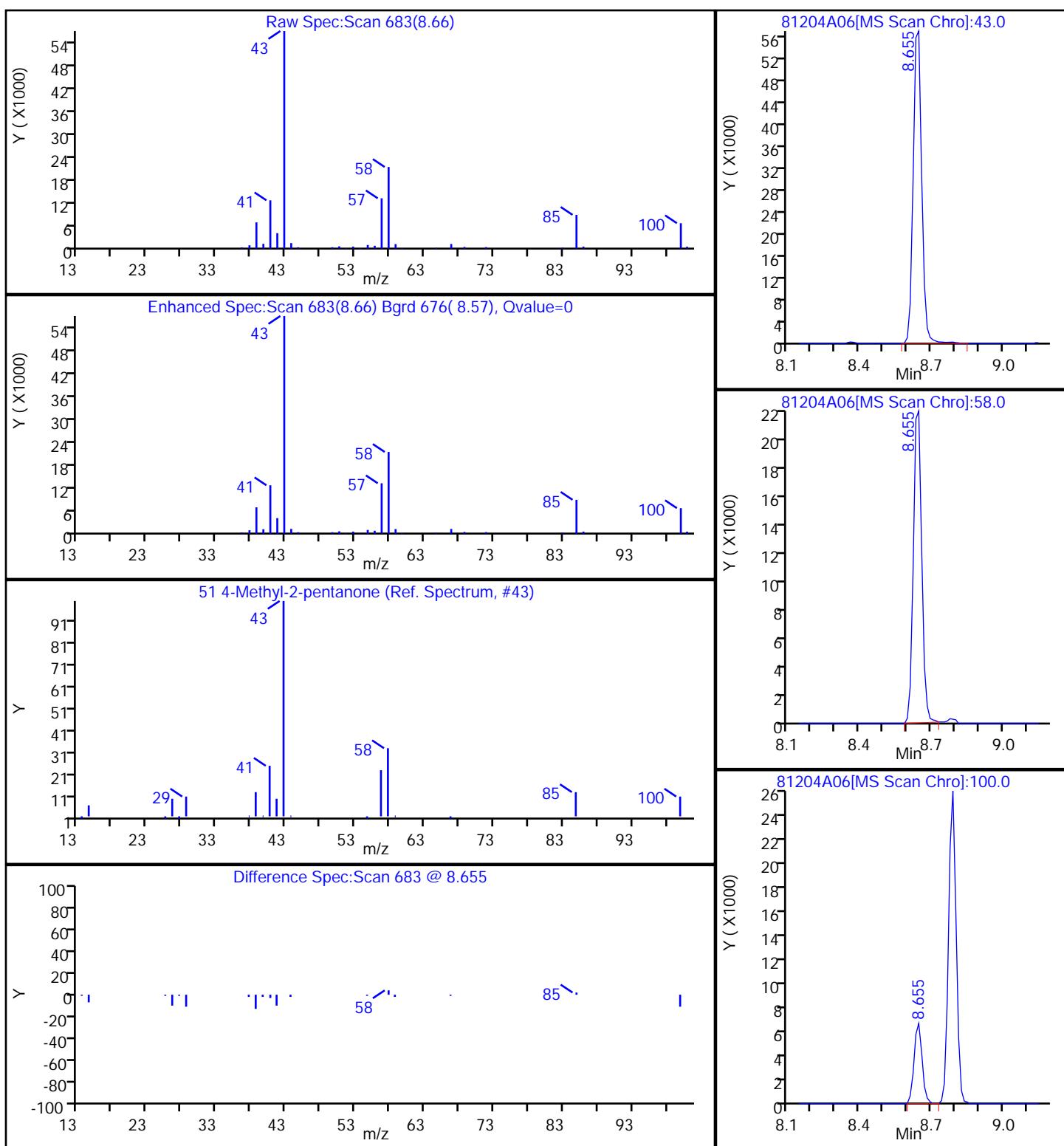
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

51 4-Methyl-2-pentanone



Report Date: 05-Dec-2014 08:20:01

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

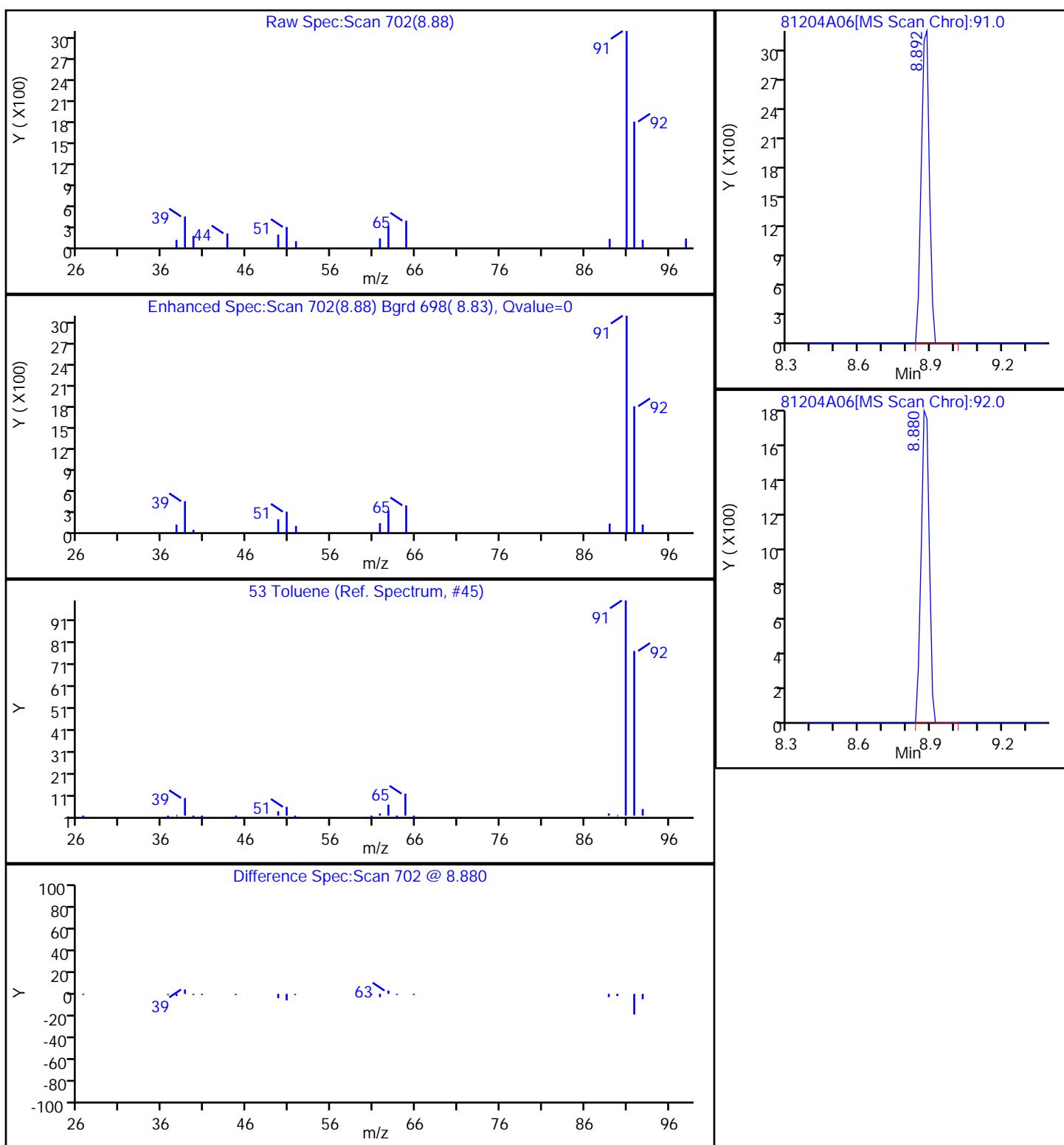
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

53 Toluene



Report Date: 05-Dec-2014 08:20:02

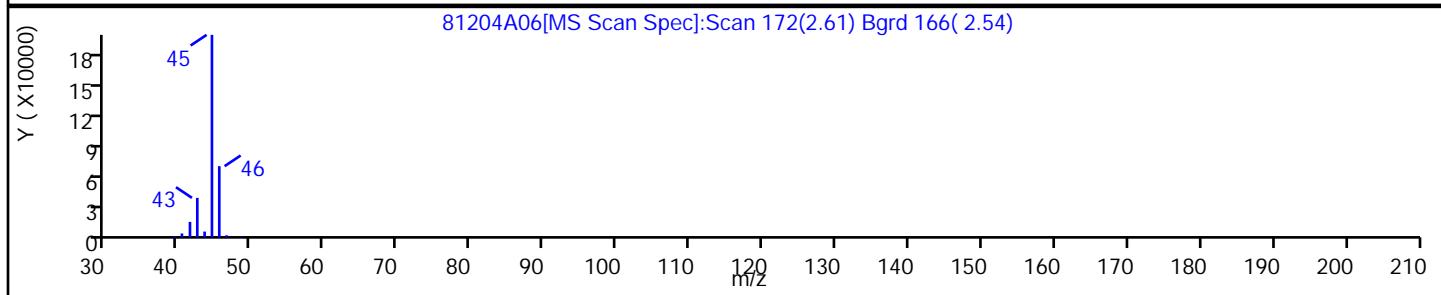
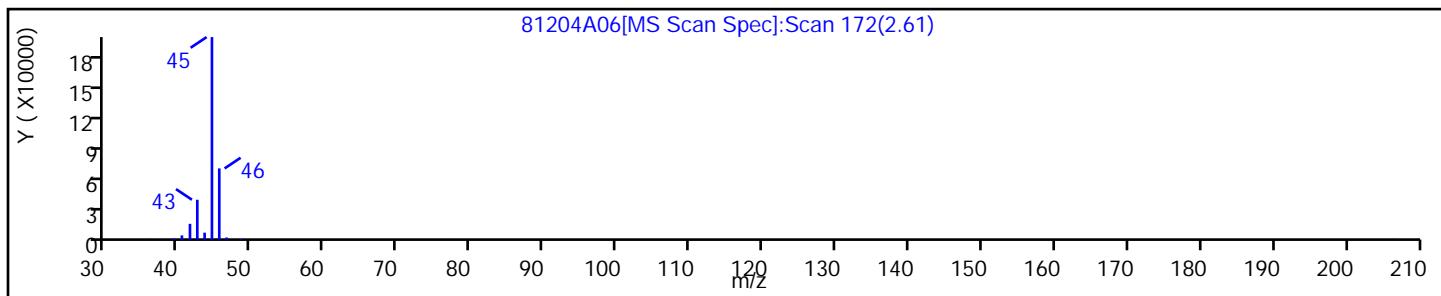
AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A06.D
 Injection Date: 04-Dec-2014 11:40:30 Inst. ID: msd8.i
 Client ID: E5AZ2 Lab ID: PL03008-001
 Sample Info: 8120414.b, PL03008-001
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: ALL
 Column1: DB-624 (0.25 mm) Detector: MS Scan

TIC @ 2.597

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown		NIST11				



Report Date: 05-Dec-2014 08:20:02

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

Purge Vol. 25 ML

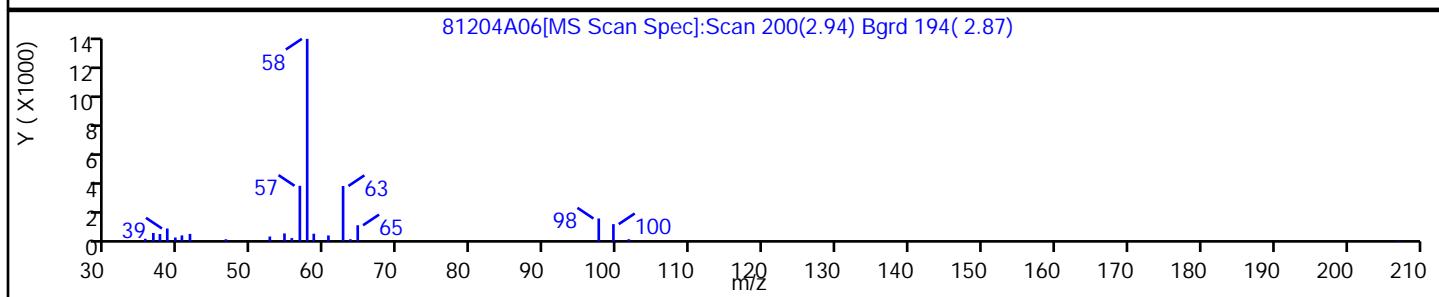
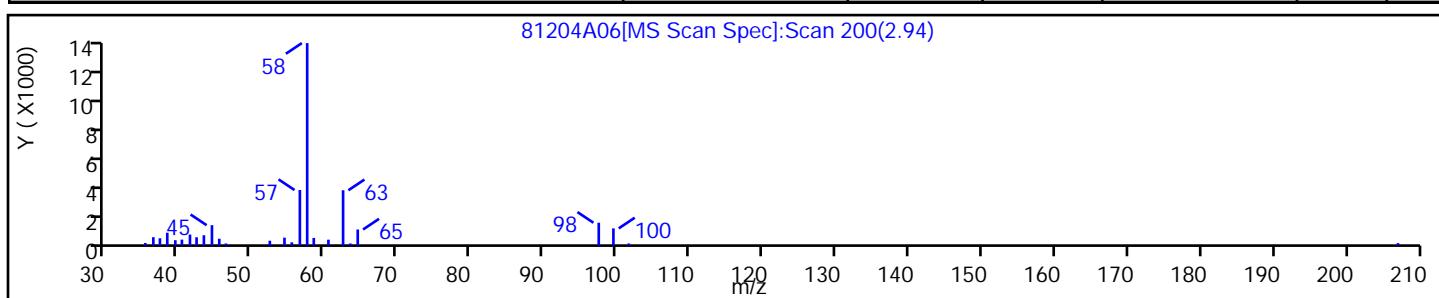
Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

TIC @ 2.928

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Unknown		NIST11				



Report Date: 05-Dec-2014 08:20:02

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A06.D

Injection Date: 04-Dec-2014 11:40:30

Inst. ID: msd8.i

Client ID: E5AZ2

Lab ID: PL03008-001

Sample Info: 8120414.b, PL03008-001

Dil. Factor: 1.0

Purge Vol. 25 ML

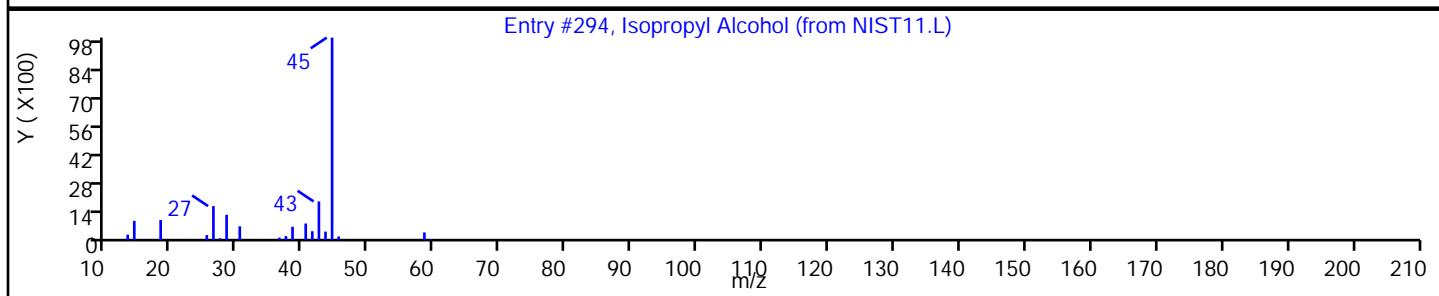
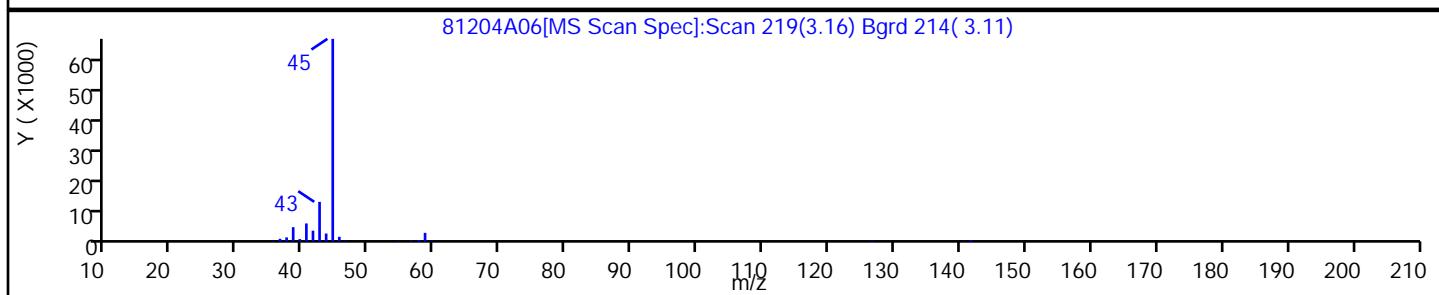
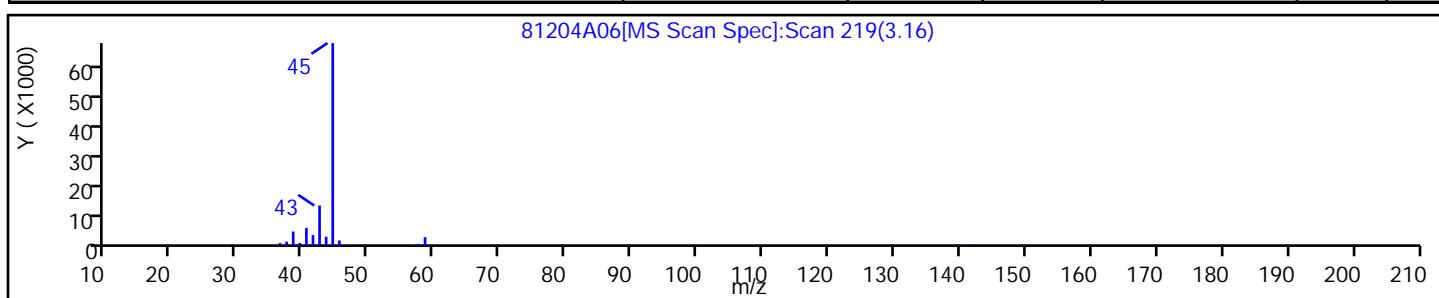
Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

TIC @ 3.153

Library Search Compound Match	CAS#	Library	Entry	Formula	Weight	Q
Isopropyl Alcohol	67-63-0	NIST11	294	C3H8O	60	86



E5AZ3

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-002

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A07

Level: (TRACE/LOW/MED) TRACE

Date Received: 12/03/2014

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.49	J
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

E5AZ3

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-002

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A07

Level: (TRACE/LOW/MED) TRACE

Date Received: 12/03/2014

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.21	J
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

E5AZ3

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-002

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A07

Level: (TRACE or LOW/MED) TRACE

Date Received: 12/03/2014

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A07.D
 Lab Sample ID: PL03008-002 Client Sample ID: E5AZ3
 Injection Date: 04-Dec-2014 12:09:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-002
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 7
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Data Reviewer: all

Detector: MS Scan

Review Date: 05-Dec-2014 08:08:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
1 Dichlorodifluoromethane	85.0		1.579		ND			
2 Chloromethane	50.0		1.721		ND			
\$ 3 Vinyl Chloride-d3	65.0	1.828	1.828	0.012	24357	3.9643	3.9643	
4 Vinyl Chloride	62.0		1.827		ND			
5 Bromomethane	94.0		2.135		ND			
\$ 6 Chloroethane-d5	69.0	2.206	2.206	0.012	15600	4.2930	4.2929	
7 Chloroethane	64.0		2.218		ND			
8 Trichlorofluoromethane	101.0		2.466		ND			
\$ 12 1,1-Dichloroethene-d2	63.0	2.964	2.964	-0.011	37703	3.0170	3.0170	
13 1,1-Dichloroethene	96.0		2.987		ND			
11 1,1,2-Trichloro-1,2,2-trifluo	101.0		2.987		ND			
14 Acetone	43.0		3.011		ND			
15 Carbon Disulfide	76.0		3.236		ND			
16 Methyl Acetate	43.0		3.401		ND			
17 Methylene Chloride	84.0		3.531		ND			
20 Methyl tert-Butyl Ether	73.0		3.875		ND			
21 trans-1,2-Dichloroethene	96.0		3.875		ND			
23 1,1-Dichloroethane	63.0		4.407		ND			
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	35746	42.171	42.171	
26 cis-1,2-Dichloroethene	96.0		5.152		ND			
28 2-Butanone	43.0		5.164		ND			
29 Bromochloromethane	128.0		5.460		ND			
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	46438	4.1343	4.1342	
31 Chloroform	83.0	5.579	5.579	0.012	5635	0.49347	0.49340	
33 1,1,1-Trichloroethane	97.0		5.815		ND			
32 Cyclohexane	56.0		5.886		ND			
34 Carbon Tetrachloride	117.0		6.028		ND			

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.001	18742	4.4828	4.4827	
\$ 36 Benzene-d6	84.0	6.253	6.253	0.012	101759	3.9454	3.9453	
37 Benzene	78.0		6.300		ND			
39 1,2-Dichloroethane	62.0		6.324		ND			
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	101432	5.0000	5.0000	
42 Trichloroethene	95.0		7.152		ND			
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	29463	4.0906	4.0905	
43 Methylcyclohexane	83.0		7.413		ND			
45 1,2-Dichloropropane	63.0		7.448		ND			
49 Bromodichloromethane	83.0		7.815		ND			
50 cis-1,3-Dichloropropene	75.0		8.383		ND			
51 4-Methyl-2-pentanone	43.0		8.643		ND			
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	86572	4.1824	4.1824	
53 Toluene	91.0	8.892	8.892	0.012	5287	0.20789	0.20780	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	18142	4.7446	4.7445	
55 trans-1,3-Dichloropropene	75.0		9.152		ND			
56 1,1,2-Trichloroethane	97.0		9.412		ND			
57 Tetrachloroethene	164.0		9.590		ND			
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	23233	44.190	44.190	
60 2-Hexanone	43.0		9.732		ND			
61 Dibromochloromethane	129.0		9.874		ND			
62 1,2-Dibromoethane	107.0		9.992		ND			
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	79698	5.0000	5.0000	
64 Chlorobenzene	112.0		10.525		ND			
65 Ethylbenzene	91.0		10.631		ND			
67 m+p-Xylenes	106.0		10.749		ND			
68 o-Xylene	106.0		11.116		ND			
69 Styrene	104.0		11.128		ND			
70 Bromoform	173.0		11.294		ND			
71 Isopropylbenzene	105.0		11.448		ND			
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	11314	4.5557	4.5557	
74 1,1,2,2-Tetrachloroethane	83.0		11.708		ND			
83 1,3-Dichlorobenzene	146.0		12.465		ND			
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	33494	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0		12.536		ND			
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	23275	4.4047	4.4047	
89 1,2-Dichlorobenzene	146.0		12.808		ND			
90 1,2-Dibromo-3-chloropropane	75.0		13.365		ND			
91 1,2,4-Trichlorobenzene	180.0		13.944		ND			
94 1,2,3-Trichlorobenzene	180.0		13.944		ND			

QC Flag Legend

Review Flags

ND - User Disabled Compound Identification

Shealy Environmental Services, Inc.

Tentatively Identified Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A07.D
 Lab Sample ID: PL03008-002 Client Sample ID: E5AZ3
 Injection Date: 04-Dec-2014 12:09:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-002
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 7
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:08:30

Tentative Identified Compound Results

RT	Response	Amount ug/L	Final Conc ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight
Quant. Compounds								
			RT	Response	Amount ug/L			

Shealy Environmental Services, Inc.

Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A07.D
 Lab Sample ID: PL03008-002 Client Sample ID: E5AZ3
 Injection Date: 04-Dec-2014 12:09:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-002
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 7
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ccv Sample: /chem/msd8.i/8120414.b/81204A04.D
 Sample Type: VSTD005NI Sublist: std.sub
 Inject. Date: 04-Dec-2014 10:28:30 Cal Amount: 5.0000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	107183	64310	150056	101432	94.6
* 63 Chlorobenzene-d5	79380	47628	111132	79698	100.4
* 85 1,4-Dichlorobenzene-d4	36207	21725	50689	33494	92.5

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	0.002
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0.001
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0.001

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

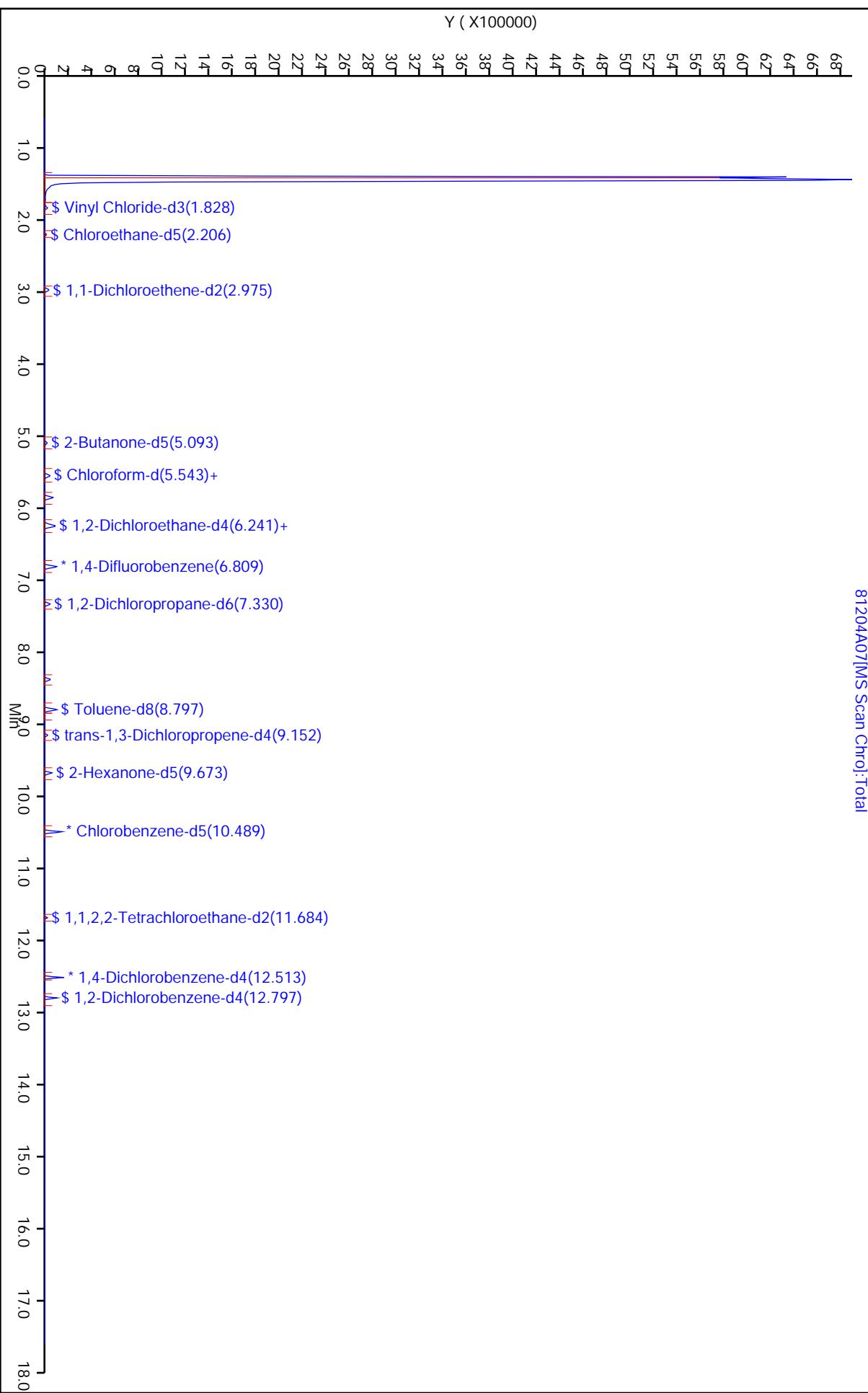
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A07.D
 Lab Sample ID: PL03008-002 Client Sample ID: E5AZ3
 Injection Date: 04-Dec-2014 12:09:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-002
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 7
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	3.9643	79.3	65- 131
\$ 6 Chloroethane-d5	5	4.2929	85.9	71- 131
\$ 12 1,1-Dichloroethene-d2	5	3.017	60.3	55- 104
\$ 25 2-Butanone-d5	50	42.171	84.3	49- 155
\$ 30 Chloroform-d	5	4.1342	82.7	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.4827	89.7	78- 129
\$ 36 Benzene-d6	5	3.9453	78.9	77- 124
\$ 44 1,2-Dichloropropane-d6	5	4.0905	81.8	79- 124
\$ 52 Toluene-d8	5	4.1824	83.6	77- 121
\$ 54 trans-1,3-Dichloropropen	5	4.7445	94.9	73- 121
\$ 58 2-Hexanone-d5	50	44.19	88.4	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	4.5557	91.1	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.4047	88.1	80- 131



Report Date: 05-Dec-2014 08:20:03

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A07.D

Injection Date: 04-Dec-2014 12:09:30

Inst. ID: msd8.i

Client ID: E5AZ3

Lab ID: PL03008-002

Sample Info: 8120414.b, PL03008-002

Dil. Factor: 1.0

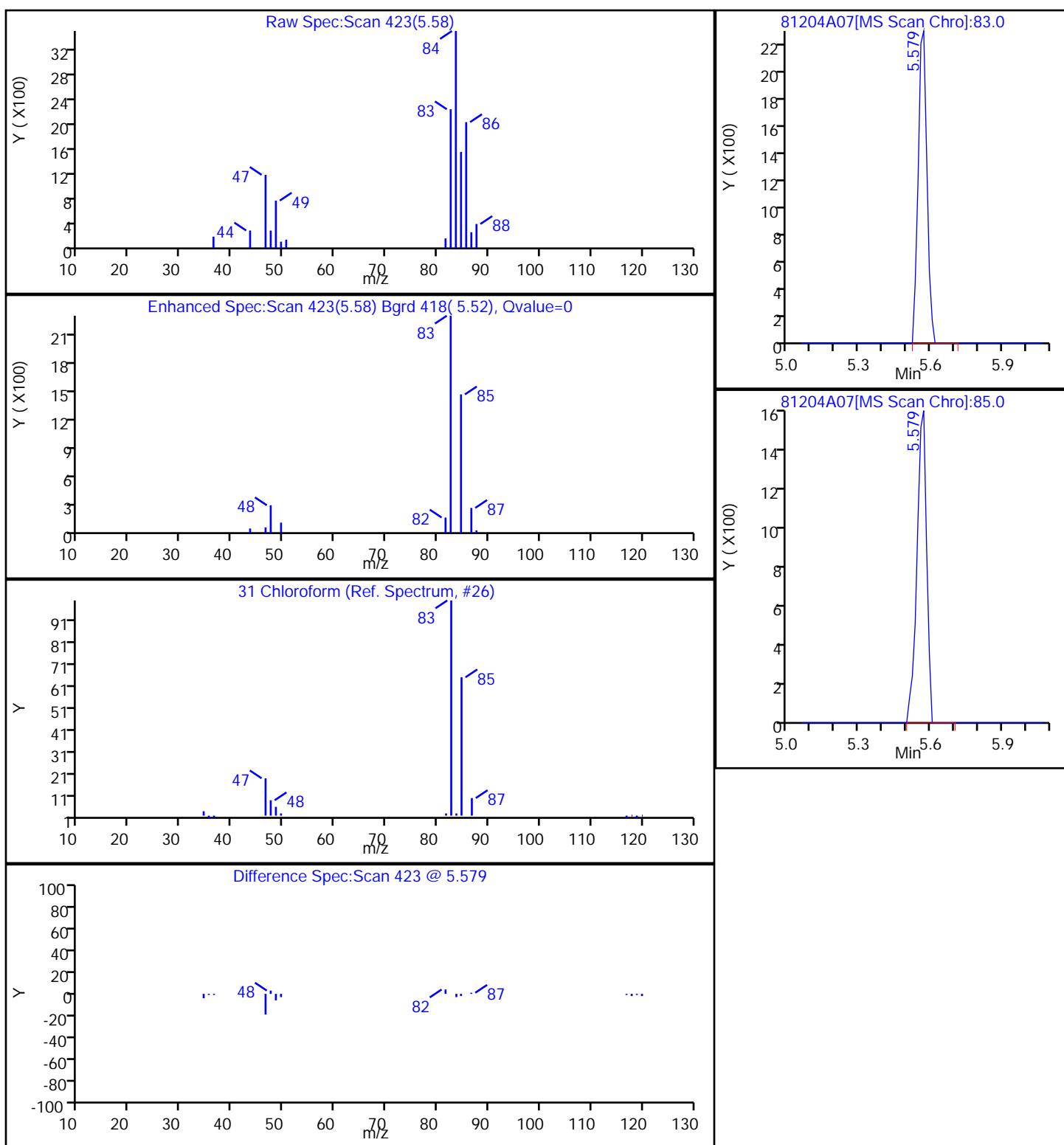
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

31 Chloroform



Report Date: 05-Dec-2014 08:20:03

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A07.D

Injection Date: 04-Dec-2014 12:09:30

Inst. ID: msd8.i

Client ID: E5AZ3

Lab ID: PL03008-002

Sample Info: 8120414.b, PL03008-002

Dil. Factor: 1.0

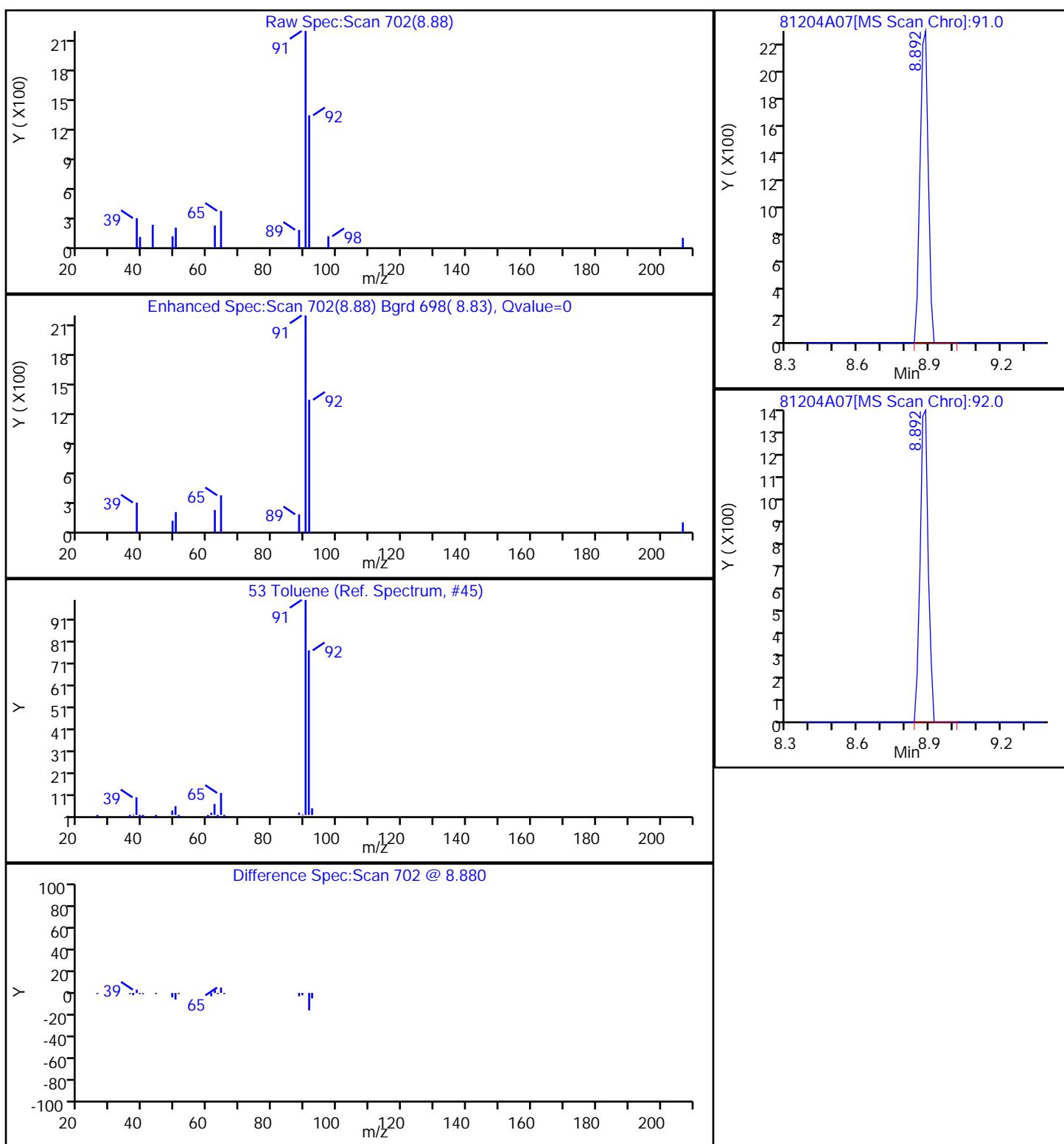
Purge Vol. 25 ML

Operator: ALL

Column1: DB-624 (0.25 mm)

Detector: MS Scan

53 Toluene



3. Standards Data

- a. Initial Calibration Data
(Form VI VOA-1, VOA-2, VOA-3)**

- b. Continuing Calibration Verification Data
(Form VII VOA-1, VOA-2, VOA-3)**

a. Initial Calibration Data
(Form VI VOA-1, VOA-2, VOA-3)

Arrange in chronological order, by instrument.

- (1) Quantitation reports for the initial (five-point) calibration.
Spectra not required.
- (2) Reconstructed Ion Chromatograms.
- (3) EICPs displaying each manual integration.

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZZInstrument ID: MSD8 Calibration Date(s): 12/03/2014 12/03/2014Heated Purge: (Y/N) N Calibration Time(s): 0000 0153Purge Volume: 25.0 (mL)GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

COMPOUND	RRF <u>0.5</u>	RRF <u>1.0</u>	RRF <u>5.0</u>	RRF <u>10</u>	RRF <u>20</u>	RRF	%RSD
Dichlorodifluoromethane	0.4101	0.3556	0.3907	0.3864	0.4069	0.3899	5.6
Chloromethane	0.5599	0.4928	0.4749	0.4561	0.4776	0.4922	8.1
Vinyl chloride	0.4997	0.4321	0.4252	0.4175	0.4329	0.4415	7.5
Bromomethane	0.2717	0.2105	0.2118	0.2077	0.1929	0.2189	13.9
Chloroethane	0.2115	0.1802	0.1801	0.1828	0.1770	0.1863	7.6
Trichlorofluoromethane	0.4124	0.3472	0.3815	0.4007	0.4062	0.3896	6.8
1,1-Dichloroethene	0.2852	0.2601	0.2779	0.2806	0.3093	0.2826	6.3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2242	0.2168	0.2324	0.2391	0.2585	0.2342	6.8
Acetone	0.0234	0.0241	0.0235	0.0222	0.0244	0.0235	3.5
Carbon disulfide	0.9393	0.8259	0.8953	0.9217	0.9401	0.9045	5.3
Methyl acetate	0.1149	0.1038	0.1148	0.1176	0.1170	0.1136	5.0
Methylene chloride	0.3721	0.2965	0.2750	0.2743	0.2844	0.3004	13.7
trans-1,2-Dichloroethene	0.3339	0.3080	0.3243	0.3313	0.3471	0.3289	4.3
Methyl tert-Butyl Ether	0.3831	0.3513	0.3881	0.3968	0.4063	0.3851	5.4
1,1-Dichloroethane	0.6740	0.6199	0.6401	0.6511	0.6708	0.6512	3.4
cis-1,2-Dichloroethene	0.3385	0.3083	0.3322	0.3325	0.3432	0.3309	4.1
2-Butanone	0.0375	0.0371	0.0338	0.0337	0.0374	0.0359	5.5
Bromochloromethane	0.0794	0.0941	0.0989	0.1023	0.1081	0.0966	11.2
Chloroform	0.6016	0.5294	0.5505	0.5562	0.5768	0.5629	4.9
1,1,1-Trichloroethane	0.6020	0.5494	0.5854	0.6240	0.5761	0.5874	4.8
Cyclohexane	1.0622	0.9086	0.8528	0.8720	0.8429	0.9077	9.9
Carbon tetrachloride	0.4329	0.4250	0.4768	0.5221	0.5157	0.4745	9.5
Benzene	1.9233	1.7274	1.7834	1.8325	1.8322	1.8198	4.0
1,2-Dichloroethane	0.2588	0.2331	0.2551	0.2559	0.2668	0.2539	4.9
Trichloroethene	0.4740	0.4611	0.4723	0.4847	0.4714	0.4727	1.8
Methylcyclohexane	0.7684	0.7647	0.8137	0.8330	0.8233	0.8006	4.0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2Instrument ID: MSD8 Calibration Date(s): 12/03/2014 12/03/2014Heated Purge: (Y/N) N Calibration Time(s): 0000 0153Purge Volume: 25.0 (mL)GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

COMPOUND	RRF <u>0.5</u>	RRF <u>1.0</u>	RRF <u>5.0</u>	RRF <u>10</u>	RRF <u>20</u>	RRF	%RSD
1,2-Dichloropropane	0.3822	0.3687	0.4041	0.4011	0.4088	0.3930	4.3
Bromodichloromethane	0.3574	0.3404	0.3806	0.3999	0.4114	0.3779	7.8
cis-1,3-Dichloropropene	0.3325	0.3349	0.4343	0.4684	0.4918	0.4124	18.1
4-Methyl-2-pentanone	0.0910	0.0844	0.1007	0.1020	0.1069	0.0970	9.3
Toluene	1.5429	1.4481	1.5989	1.6646	1.7232	1.5955	6.7
trans-1,3-Dichloropropene	0.1946	0.1934	0.2710	0.2846	0.3090	0.2505	21.3
1,1,2-Trichloroethane	0.1313	0.1352	0.1515	0.1483	0.1566	0.1446	7.5
Tetrachloroethene	0.2856	0.2818	0.3128	0.3280	0.3350	0.3086	7.8
2-Hexanone	0.0510	0.0510	0.0557	0.0538	0.0610	0.0545	7.6
Dibromochloromethane	0.1192	0.1124	0.1552	0.1647	0.1820	0.1467	20.4
1,2-Dibromoethane	0.1182	0.1109	0.1404	0.1440	0.1517	0.1330	13.2
Chlorobenzene	0.8824	0.7635	0.8779	0.8855	0.9516	0.8722	7.8
Ethylbenzene	1.6712	1.4874	1.7432	1.8049	1.8755	1.7165	8.7
o-Xylene	0.6041	0.5761	0.6539	0.6752	0.7217	0.6462	8.9
m,p-Xylene	0.6576	0.5675	0.6771	0.6954	0.7269	0.6649	9.0
Styrene	0.7238	0.7031	0.8607	0.9115	1.0064	0.8411	15.2
Bromoform	0.0785	0.1052	0.1328	0.1529	0.1703	0.1280	28.7
Isopropylbenzene	1.6160	1.4782	1.7930	1.8438	1.9525	1.7367	10.9
1,1,2,2-Tetrachloroethane	0.1432	0.1329	0.1648	0.1635	0.1685	0.1546	10.1
1,3-Dichlorobenzene	1.3508	1.2599	1.3793	1.3989	1.4762	1.3730	5.7
1,4-Dichlorobenzene	1.3081	1.2322	1.3133	1.3189	1.3692	1.3083	3.7
1,2-Dichlorobenzene	1.1486	1.0531	1.1825	1.1956	1.2319	1.1623	5.8
1,2-Dibromo-3-chloropropane	0.0268	0.0286	0.0436	0.0432	0.0454	0.0375	24.1
1,2,4-Trichlorobenzene	0.7831	0.7767	0.8967	0.8955	0.9219	0.8548	8.1
1,2,3-Trichlorobenzene	0.7831	0.5712	0.6735	0.6666	0.6855	0.6760	11.1

6C - FORM VI VOA-3
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2

Instrument ID: MSD8 Calibration Date(s): 12/03/2014 12/03/2014

Heated Purge: (Y/N) N Calibration Time(s): 0000 0153

Purge Volume: 25.0 (mL)

GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

COMPOUND	RRF <u>0.5</u>	RRF <u>1.0</u>	RRF <u>5.0</u>	RRF <u>10</u>	RRF <u>20</u>	RRF	%RSD
Vinyl Chloride-d3	0.3431	0.2908	0.2983	0.2851	0.2970	0.3029	7.6
Chloroethane-d5	0.1968	0.1751	0.1785	0.1772	0.1680	0.1791	6.0
1,1-Dichloroethene-d2	0.6438	0.5747	0.6099	0.6019	0.6497	0.6160	5.0
2-Butanone-d5	0.0375	0.0380	0.0430	0.0418	0.0486	0.0418	10.7
Chloroform-d	0.5606	0.5221	0.5576	0.5508	0.5774	0.5537	3.6
1,2-Dichloroethane-d4	0.2008	0.1909	0.2187	0.2125	0.2076	0.2061	5.2
Benzene-d6	1.7360	1.5273	1.6096	1.6086	1.6091	1.6181	4.6
1,2-Dichloropropane-d6	0.5161	0.4185	0.4411	0.4412	0.4424	0.4519	8.3
Toluene-d8	1.2882	1.1645	1.3156	1.3271	1.3975	1.2986	6.6
trans-1,3-Dichloropropene-d4	0.2091	0.1902	0.2531	0.2585	0.2885	0.2399	16.5
2-Hexanone-d5	0.0289	0.0267	0.0348	0.0336	0.0410	0.0330	16.9
1,1,2,2-Tetrachloroethane-d2	0.1395	0.1416	0.1667	0.1645	0.1668	0.1558	9.0
1,2-Dichlorobenzene-d4	0.7685	0.7240	0.8040	0.8018	0.8458	0.7888	5.8

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D02.D
 Lab Sample ID: VSTD020MV Client Sample ID: VSTD020MV
 Injection Date: 03-Dec-2014 00:00:30 Dil. Factor: 1.0
 Operator: PMM2 Inst. ID: msd8.i
 Sample Info: 8120214D.b, VSTD020MV
 Method: \\Organics\DD\chem\msd8.i\8120214D.b\TRACE-8.m
 Method Date: 03-Dec-2014 07:56:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Ical, Level: 5 ALS Bottle: 2
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

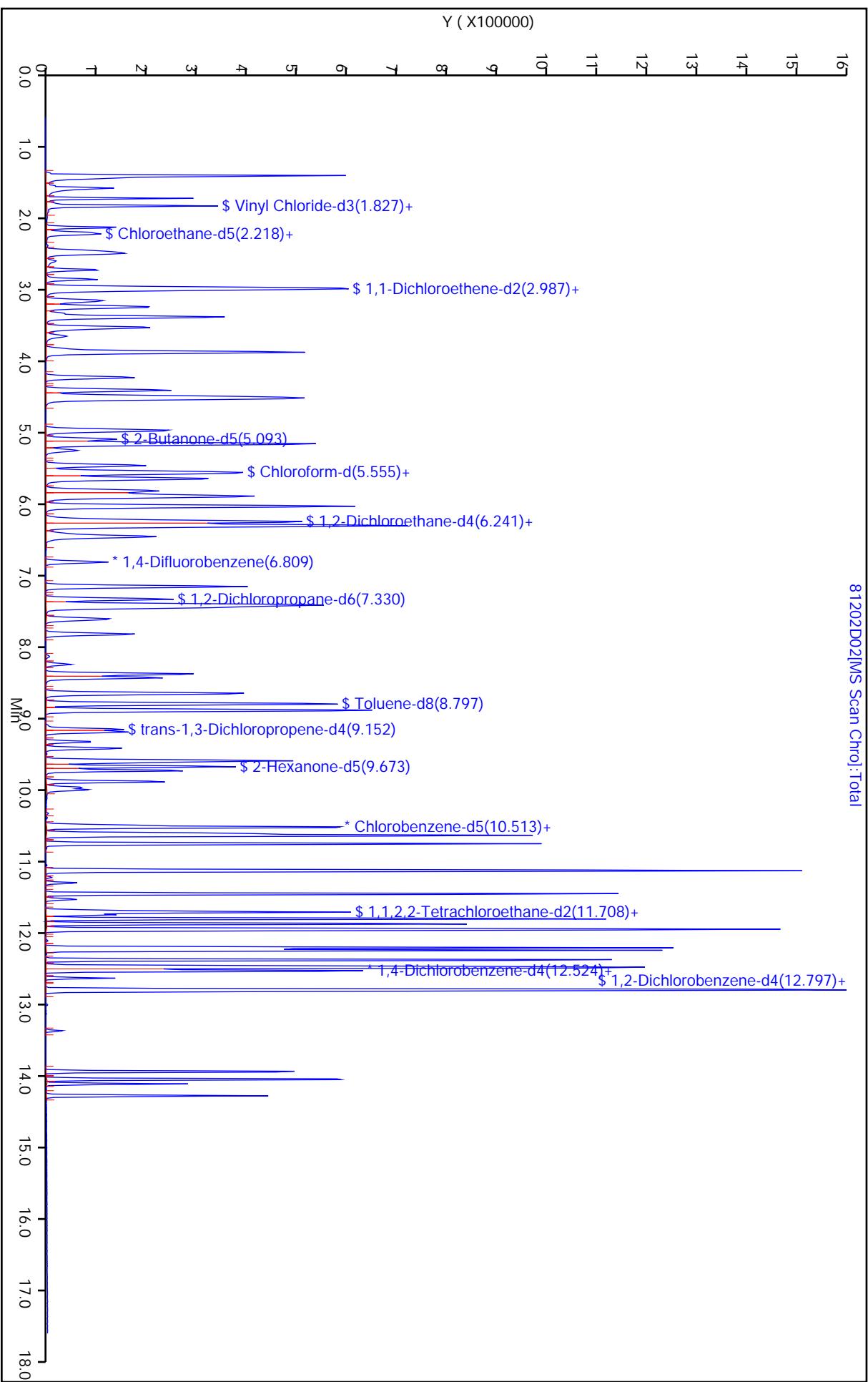
Review Date: 03-Dec-2014 07:50:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	181096	20.000	26.809	
2 Chloromethane	50.0	1.721	1.721	0.000	212551	20.000	22.872	
\$ 3 Vinyl Chloride-d3	65.0	1.827	1.827	0.011	132195	20.000	24.406	
4 Vinyl Chloride	62.0	1.827	1.827	-0.001	192688	20.000	24.726	
5 Bromomethane	94.0	2.123	2.123	0.000	85840	20.000	21.595	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	74758	20.000	22.170	
7 Chloroethane	64.0	2.218	2.218	0.000	78792	20.000	23.145	
8 Trichlorofluoromethane	101.0	2.466	2.466	-0.001	180798	20.000	27.458	
\$ 12 1,1-Dichloroethene-d2	63.0	2.975	2.975	0.011	289177	20.000	23.956	
13 1,1-Dichloroethene	96.0	2.987	2.987	0.012	137643	20.000	23.355	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	115071	20.000	24.444	
14 Acetone	43.0	3.011	3.011	0.000	108652	200.00	202.38	
15 Carbon Disulfide	76.0	3.247	3.247	0.011	418387	20.000	22.871	
16 Methyl Acetate	43.0	3.389	3.389	-0.012	52088	20.000	20.559	
17 Methylene Chloride	84.0	3.531	3.531	0.000	126583	20.000	20.306	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	180840	20.000	21.016	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	154465	20.000	22.774	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	298536	20.000	22.077	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	216153	200.00	234.19	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	-0.001	152754	20.000	22.068	
28 2-Butanone	43.0	5.164	5.164	-0.012	166550	200.00	212.31	
29 Bromochloromethane	128.0	5.460	5.460	0.000	48123	20.000	22.608	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	256959	20.000	22.839	
31 Chloroform	83.0	5.567	5.567	0.000	256711	20.000	22.029	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	190616	20.000	20.736	
32 Cyclohexane	56.0	5.886	5.886	0.000	278899	20.000	20.580	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	170647	20.000	21.382	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.217	6.217	-0.001	92387	20.000	21.321	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	532423	20.000	22.378	
37 Benzene	78.0	6.300	6.300	0.000	606222	20.000	21.788	
39 1,2-Dichloroethane	62.0	6.312	6.312	-0.012	118747	20.000	21.639	
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	111266	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	155982	20.000	21.377	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	146379	20.000	21.113	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	272428	20.000	22.553	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	135268	20.000	21.855	
49 Bromodichloromethane	83.0	7.815	7.815	0.000	136137	20.000	21.946	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	162742	20.000	24.043	
51 4-Methyl-2-pentanone	43.0	8.643	8.643	0.000	353570	200.00	225.83	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	462418	20.000	24.095	
53 Toluene	91.0	8.880	8.880	0.000	570182	20.000	23.090	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	95451	20.000	24.660	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	102252	20.000	24.248	
56 1,1,2-Trichloroethane	97.0	9.412	9.412	0.000	51819	20.000	21.733	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	110830	20.000	23.494	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	135709	200.00	244.65	
60 2-Hexanone	43.0	9.732	9.732	0.000	201976	200.00	227.50	
61 Dibromochloromethane	129.0	9.874	9.874	0.000	60214	20.000	22.534	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	50185	20.000	22.844	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	82720	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	314851	20.000	22.880	
65 Ethylbenzene	91.0	10.631	10.631	0.000	620565	20.000	23.190	
67 m+p-Xylenes	106.0	10.749	10.749	-0.001	240526	20.000	23.121	
68 o-Xylene	106.0	11.116	11.116	0.000	238791	20.000	23.539	
69 Styrene	104.0	11.128	11.128	0.000	332989	20.000	24.477	
70 Bromoform	173.0	11.294	11.294	0.000	26634	20.000	22.972	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	646036	20.000	23.693	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	55186	20.000	22.117	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	55741	20.000	21.349	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	230850	20.000	21.355	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	39095	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	214108	20.000	20.848	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	132260	20.000	23.133	
89 1,2-Dichlorobenzene	146.0	12.808	12.808	0.000	192637	20.000	20.809	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	7104	20.000	18.315	
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	144174	20.000	20.454	
94 1,2,3-Trichlorobenzene	180.0	14.276	14.276	0.000	107204	20.000	20.663	

Report Date: 03-Dec-2014 08:52:28

AIM Revision: 1.0 31-Oct-2014 07:30:18



Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D03.D
 Lab Sample ID: VSTD010MV Client Sample ID: VSTD010MV
 Injection Date: 03-Dec-2014 00:28:30 Dil. Factor: 1.0
 Operator: PMM2 Inst. ID: msd8.i
 Sample Info: 8120214D.b, VSTD010MV
 Method: \\Organics\DD\chem\msd8.i\8120214D.b\TRACE-8.m
 Method Date: 03-Dec-2014 07:56:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Ical, Level: 4 ALS Bottle: 3
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

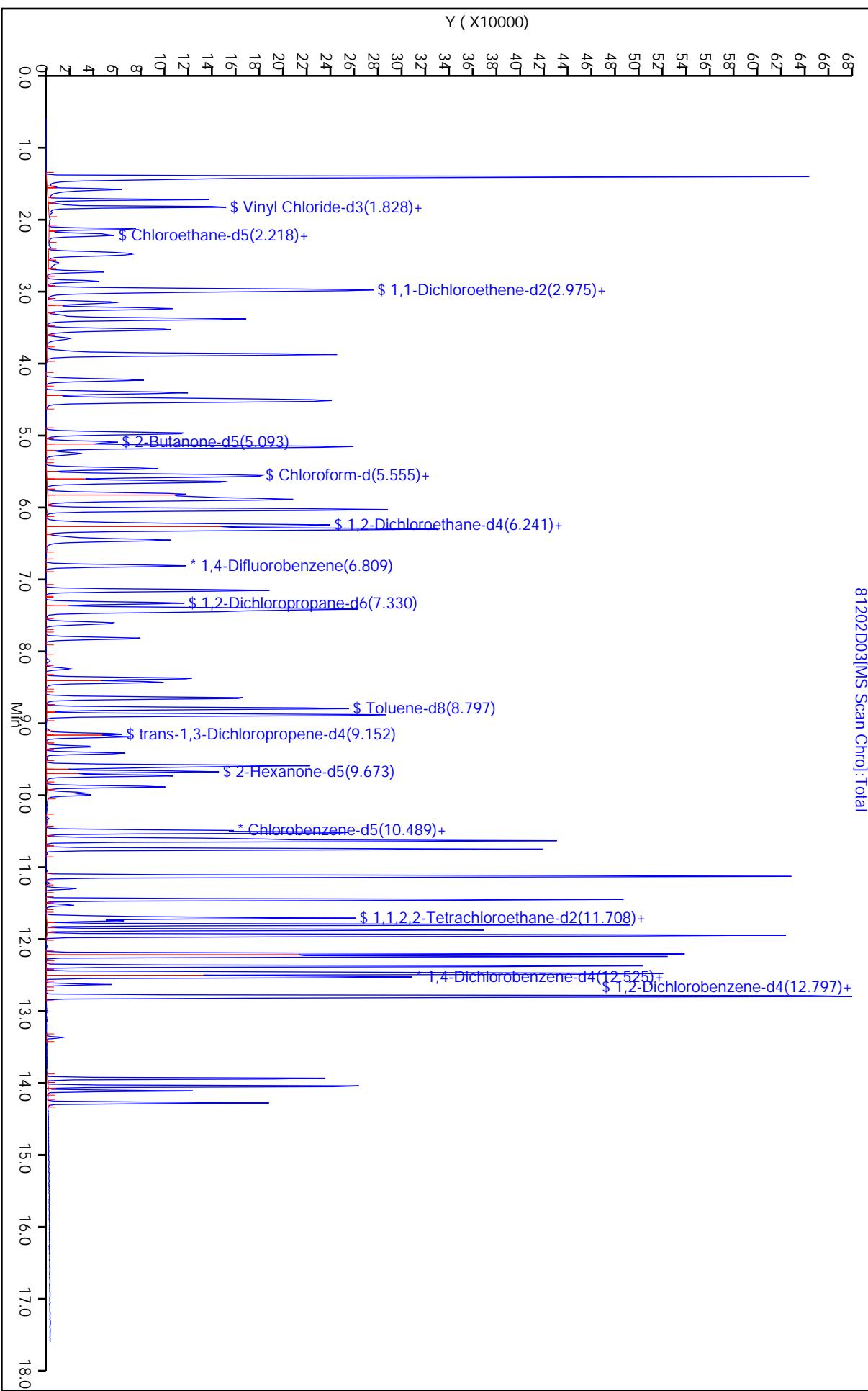
Detector: MS Scan

Data Reviewer: all

Review Date: 03-Dec-2014 07:51:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	88049	10.000	11.576	
2 Chloromethane	50.0	1.721	1.721	0.000	103943	10.000	10.360	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	64982	10.000	10.953	
4 Vinyl Chloride	62.0	1.828	1.828	0.000	95145	10.000	10.955	
5 Bromomethane	94.0	2.123	2.123	0.000	47325	10.000	10.847	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	40390	10.000	10.954	
7 Chloroethane	64.0	2.218	2.218	0.000	41669	10.000	11.045	
8 Trichlorofluoromethane	101.0	2.467	2.467	0.000	91307	10.000	12.069	
\$ 12 1,1-Dichloroethene-d2	63.0	2.964	2.964	0.000	137177	10.000	10.626	
13 1,1-Dichloroethene	96.0	2.975	2.975	0.000	63946	10.000	10.200	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	54493	10.000	10.735	
14 Acetone	43.0	3.011	3.011	0.000	50691	100.00	93.224	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	210057	10.000	10.693	
16 Methyl Acetate	43.0	3.401	3.401	0.000	26799	10.000	10.159	
17 Methylene Chloride	84.0	3.531	3.531	0.000	62507	10.000	9.6333	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	90428	10.000	10.212	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	75512	10.000	10.502	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	148377	10.000	10.418	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	95181	100.00	102.80	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	0.000	75778	10.000	10.423	
28 2-Butanone	43.0	5.176	5.176	0.000	76700	100.00	94.939	
29 Bromochloromethane	128.0	5.460	5.460	0.000	23310	10.000	10.549	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	125519	10.000	10.663	
31 Chloroform	83.0	5.567	5.567	0.000	126749	10.000	10.388	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	99420	10.000	10.853	
32 Cyclohexane	56.0	5.886	5.886	0.000	138930	10.000	10.162	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	83174	10.000	10.612	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.000	48423	10.000	10.819	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	256286	10.000	10.870	
37 Benzene	78.0	6.300	6.300	0.000	291951	10.000	10.597	
39 1,2-Dichloroethane	62.0	6.324	6.324	0.000	58309	10.000	10.255	
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	113946	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	77226	10.000	10.646	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	70295	10.000	10.338	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	132707	10.000	10.881	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	63902	10.000	10.495	
49 Bromodichloromethane	83.0	7.815	7.815	0.000	63713	10.000	10.610	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	74624	10.000	11.252	
51 4-Methyl-2-pentanone	43.0	8.643	8.643	0.000	162473	100.00	108.00	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	211437	10.000	11.050	
53 Toluene	91.0	8.880	8.880	0.000	265198	10.000	10.753	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	41185	10.000	11.053	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	45339	10.000	11.034	
56 1,1,2-Trichloroethane	97.0	9.412	9.412	0.000	23623	10.000	10.127	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	52264	10.000	10.988	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	53481	100.00	104.28	
60 2-Hexanone	43.0	9.732	9.732	0.000	85678	100.00	101.62	
61 Dibromochloromethane	129.0	9.874	9.874	0.000	26235	10.000	10.293	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	22949	10.000	10.688	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	79660	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	141085	10.000	10.356	
65 Ethylbenzene	91.0	10.631	10.631	0.000	287563	10.000	10.731	
67 m+p-Xylenes	106.0	10.750	10.750	0.000	110788	10.000	10.641	
68 o-Xylene	106.0	11.116	11.116	0.000	107577	10.000	10.651	
69 Styrene	104.0	11.128	11.128	0.000	145222	10.000	10.782	
70 Bromoform	173.0	11.294	11.294	0.000	11401	10.000	10.577	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	293762	10.000	10.744	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	26210	10.000	10.843	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	26047	10.000	10.140	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	104327	10.000	9.9098	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	37288	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	98359	10.000	9.8573	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	59792	10.000	10.791	
89 1,2-Dichlorobenzene	146.0	12.808	12.808	0.000	89163	10.000	9.8974	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	3221	10.000	8.8897	
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	66780	10.000	9.8780	
94 1,2,3-Trichlorobenzene	180.0	14.276	14.276	0.000	49711	10.000	10.017	



Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D04.D
 Lab Sample ID: VSTD005MV Client Sample ID: VSTD005MV
 Injection Date: 03-Dec-2014 00:56:30 Dil. Factor: 1.0
 Operator: PMM2 Inst. ID: msd8.i
 Sample Info: 8120214D.b, VSTD005MV
 Method: \\Organics\DD\chem\msd8.i\8120214D.b\TRACE-8.m
 Method Date: 03-Dec-2014 07:56:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Ical, Level: 3 ALS Bottle: 4
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

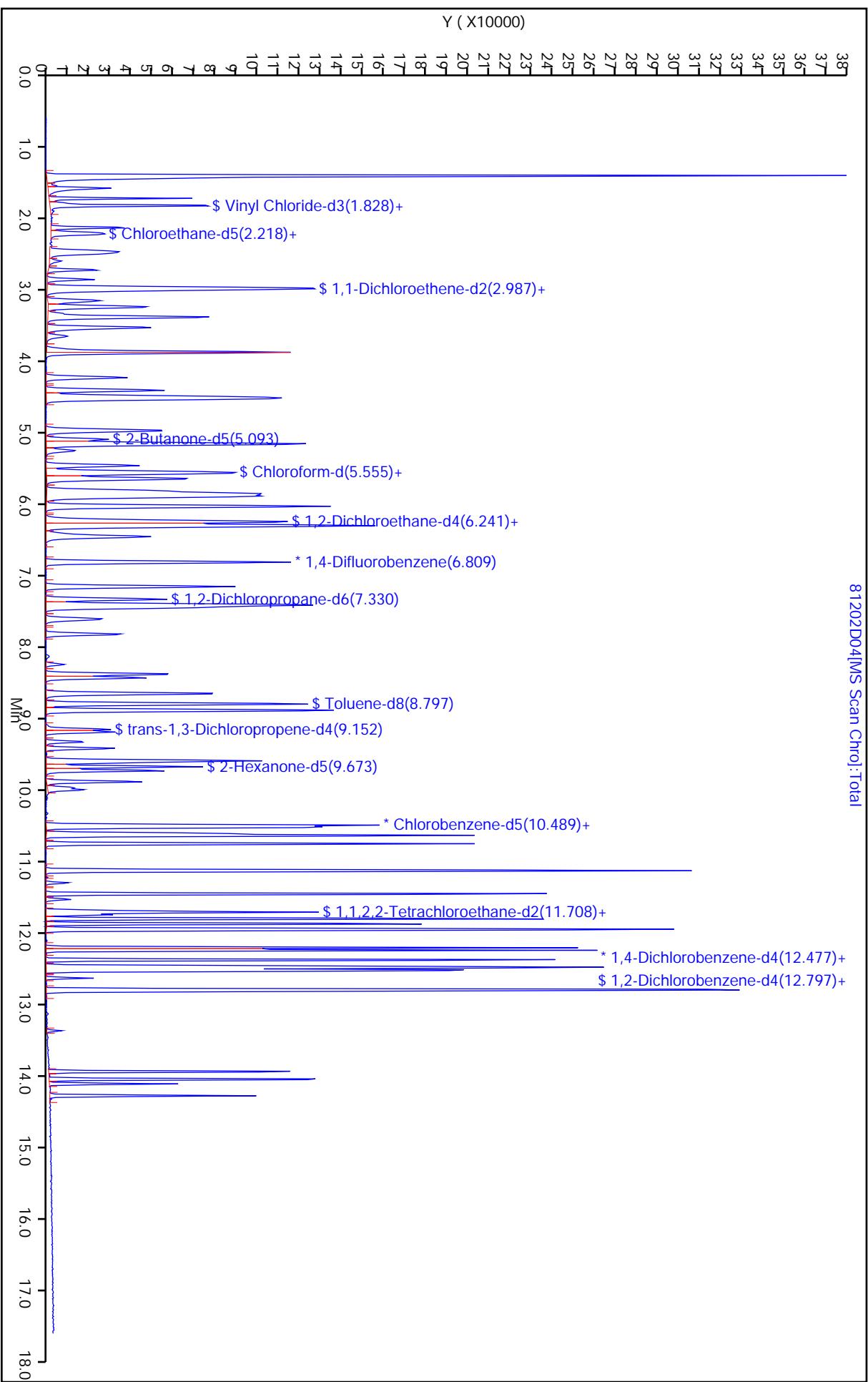
Review Date: 03-Dec-2014 07:46:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	42717	5.0000	6.9359	
2 Chloromethane	50.0	1.721	1.721	0.000	51918	5.0000	5.9470	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	32613	5.0000	6.4364	
4 Vinyl Chloride	62.0	1.828	1.828	0.000	46491	5.0000	6.5196	
5 Bromomethane	94.0	2.135	2.135	0.000	23159	5.0000	6.2030	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	19520	5.0000	6.0966	
7 Chloroethane	64.0	2.230	2.230	0.000	19689	5.0000	6.2200	
8 Trichlorofluoromethane	101.0	2.466	2.466	0.000	41712	5.0000	7.0784	
\$ 12 1,1-Dichloroethene-d2	63.0	2.975	2.975	0.000	66683	5.0000	5.8375	
13 1,1-Dichloroethene	96.0	2.987	2.987	0.000	30382	5.0000	5.5143	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	25411	5.0000	5.8308	
14 Acetone	43.0	3.011	3.011	0.000	25643	50.000	49.331	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	97882	5.0000	5.7225	
16 Methyl Acetate	43.0	3.401	3.401	0.000	12553	5.0000	5.0897	
17 Methylene Chloride	84.0	3.531	3.531	0.000	30063	5.0000	5.0624	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	42433	5.0000	5.0724	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	35454	5.0000	5.5297	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	69986	5.0000	5.4400	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	47051	50.000	52.034	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	0.000	36315	5.0000	5.4898	
28 2-Butanone	43.0	5.176	5.176	0.000	36969	50.000	48.773	
29 Bromochloromethane	128.0	5.460	5.460	0.000	10808	5.0000	5.3157	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	60958	5.0000	5.5951	
31 Chloroform	83.0	5.567	5.567	0.000	60181	5.0000	5.3929	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	45196	5.0000	5.3677	
32 Cyclohexane	56.0	5.886	5.886	0.000	65835	5.0000	5.4252	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	36811	5.0000	4.9873	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.000	23914	5.0000	5.6410	
\$ 36 Benzene-d6	84.0	6.253	6.253	0.000	124260	5.0000	5.6525	
37 Benzene	78.0	6.300	6.300	0.000	137682	5.0000	5.4433	
39 1,2-Dichloroethane	62.0	6.324	6.324	0.000	27891	5.0000	5.2601	
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	109328	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	36465	5.0000	5.4764	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	34053	5.0000	5.3053	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	62819	5.0000	5.8156	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	31200	5.0000	5.5179	
49 Bromodichloromethane	83.0	7.815	7.815	0.000	29379	5.0000	5.0819	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	33531	5.0000	5.3650	
51 4-Methyl-2-pentanone	43.0	8.643	8.643	0.000	77729	50.000	53.272	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	101567	5.0000	5.7647	
53 Toluene	91.0	8.880	8.880	0.000	123435	5.0000	5.5124	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	19543	5.0000	5.4334	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	20925	5.0000	5.3567	
56 1,1,2-Trichloroethane	97.0	9.412	9.412	0.000	11692	5.0000	5.3189	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	24145	5.0000	5.6907	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	26837	50.000	52.185	
60 2-Hexanone	43.0	9.732	9.732	0.000	43034	50.000	52.725	
61 Dibromochloromethane	129.0	9.874	9.874	0.000	11982	5.0000	4.7586	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	10837	5.0000	5.3813	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	77200	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	67776	5.0000	5.4250	
65 Ethylbenzene	91.0	10.631	10.631	0.000	134575	5.0000	5.5436	
67 m+p-Xylenes	106.0	10.750	10.750	0.000	52275	5.0000	5.5458	
68 o-Xylene	106.0	11.128	11.128	0.000	50480	5.0000	5.4732	
69 Styrene	104.0	11.128	11.128	0.000	66443	5.0000	5.3877	
70 Bromoform	173.0	11.294	11.294	0.000	4879	5.0000	4.2663	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	138416	5.0000	5.6385	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	12870	5.0000	5.5567	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	12723	5.0000	5.2613	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	50659	5.0000	5.0453	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	36729	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	48237	5.0000	5.0562	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	29530	5.0000	5.5865	
89 1,2-Dichlorobenzene	146.0	12.808	12.808	0.000	43431	5.0000	5.0429	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	1600	5.0000	4.3293	
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	32935	5.0000	4.9754	
94 1,2,3-Trichlorobenzene	180.0	14.276	14.276	0.000	24737	5.0000	5.0761	

Report Date: 03-Dec-2014 08:52:30

AIM Revision: 1.0 31-Oct-2014 07:30:18



Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D
 Lab Sample ID: VSTD001MV Client Sample ID: VSTD001MV
 Injection Date: 03-Dec-2014 01:25:30 Dil. Factor: 1.0
 Operator: PMM2 Inst. ID: msd8.i
 Sample Info: 8120214D.b, VSTD001MV
 Method: \\Organics\DD\chem\msd8.i\8120214D.b\TRACE-8.m
 Method Date: 03-Dec-2014 07:56:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Ical, Level: 2 ALS Bottle: 5
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Data Reviewer: all

Detector: MS Scan

Review Date: 03-Dec-2014 07:51:30

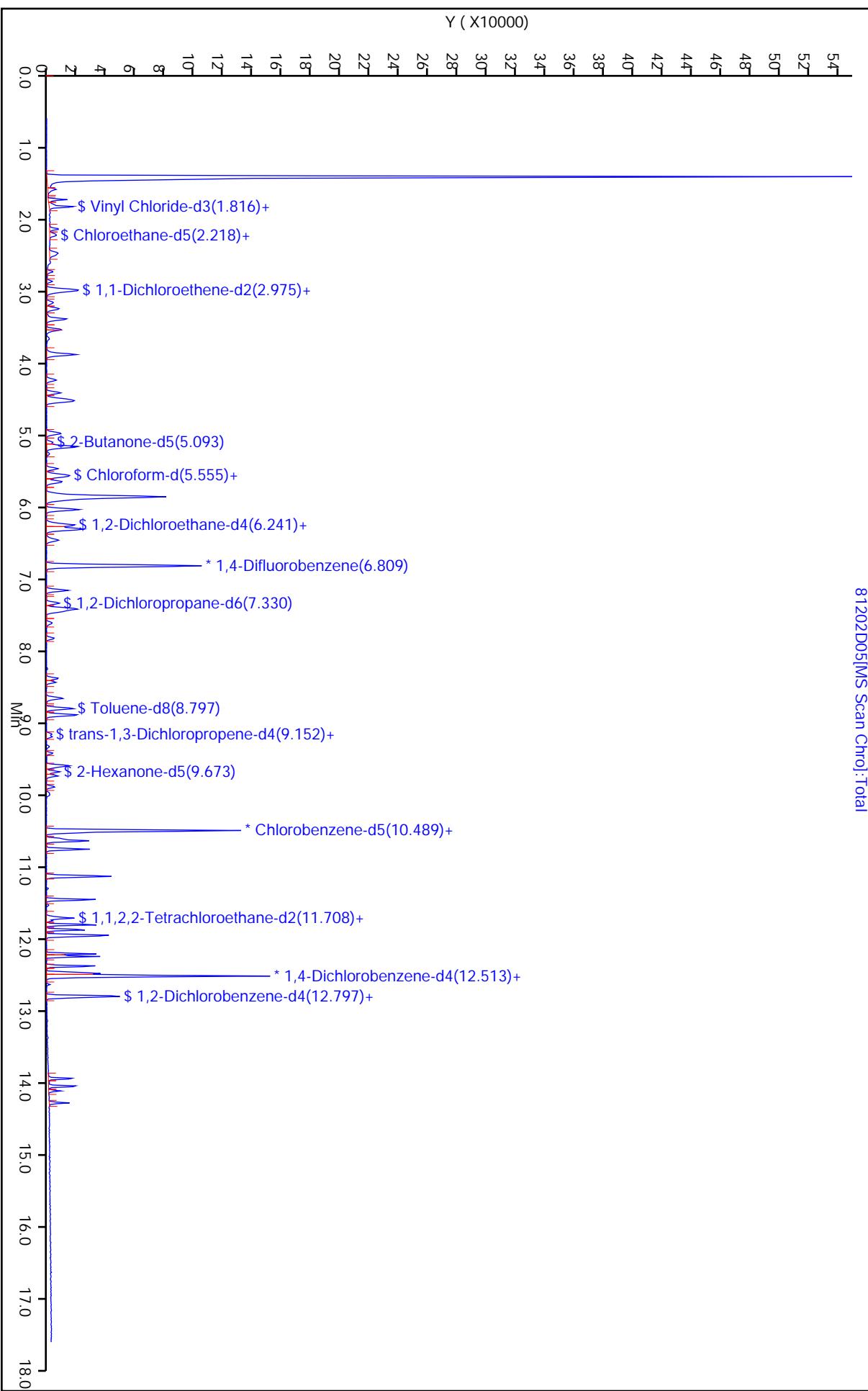
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	7201	1.0000	1.0037	
2 Chloromethane	50.0	1.721	1.721	0.000	9978	1.0000	1.0617	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	5888	1.0000	1.0559	
4 Vinyl Chloride	62.0	1.828	1.828	0.000	8750	1.0000	1.0630	
5 Bromomethane	94.0	2.135	2.135	0.000	4262	1.0000	1.0503	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	3546	1.0000	1.0495	
7 Chloroethane	64.0	2.218	2.218	0.000	3648	1.0000	1.0342	
8 Trichlorofluoromethane	101.0	2.466	2.466	0.000	7031	1.0000	0.98157	
\$ 12 1,1-Dichloroethene-d2	63.0	2.963	2.963	0.000	11637	1.0000	0.98952	
13 1,1-Dichloroethene	96.0	2.987	2.987	0.000	5267	1.0000	0.94359	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	4389	1.0000	0.95428	
14 Acetone	43.0	3.023	3.023	0.000	4877	10.000	10.152	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	16723	1.0000	0.94814	
16 Methyl Acetate	43.0	3.401	3.401	0.000	2102	1.0000	0.91223	
17 Methylene Chloride	84.0	3.531	3.531	0.000	6004	1.0000	1.0368	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	7114	1.0000	0.91748	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	6237	1.0000	0.96458	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	12553	1.0000	0.98184	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	7700	10.000	9.3957	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	0.000	6242	1.0000	0.95287	
28 2-Butanone	43.0	5.176	5.176	0.000	7511	10.000	10.404	
29 Bromochloromethane	128.0	5.460	5.460	0.000	1906	1.0000	0.96310	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	10572	1.0000	0.98977	
31 Chloroform	83.0	5.567	5.567	0.000	10720	1.0000	0.97954	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	7487	1.0000	0.95464	
32 Cyclohexane	56.0	5.886	5.886	0.000	12381	1.0000	1.0370	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	5792	1.0000	0.88364	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.000	3865	1.0000	0.96232	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	20812	1.0000	1.0048	
37 Benzene	78.0	6.300	6.300	0.000	23539	1.0000	0.98327	
39 1,2-Dichloroethane	62.0	6.312	6.324	0.000	4720	1.0000	0.93778	M
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	101243	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	6283	1.0000	0.9917	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	5703	1.0000	0.97589	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	10421	1.0000	0.97938	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	5024	1.0000	0.96064	M
49 Bromodichloromethane	83.0	7.815	7.815	0.000	4639	1.0000	0.90450	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	4564	1.0000	0.81135	
51 4-Methyl-2-pentanone	43.0	8.655	8.655	0.000	11505	10.000	8.9225	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	15869	1.0000	0.94450	
53 Toluene	91.0	8.880	8.880	0.000	19733	1.0000	0.92458	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	2592	1.0000	0.81498	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	2636	1.0000	0.76214	
56 1,1,2-Trichloroethane	97.0	9.412	9.412	0.000	1843	1.0000	0.92131	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	3840	1.0000	0.93437	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	3632	10.000	8.4402	
60 2-Hexanone	43.0	9.732	9.732	0.000	6953	10.000	9.5525	M
61 Dibromochloromethane	129.0	9.874	9.874	0.000	1531	1.0000	0.72709	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	1511	1.0000	0.83588	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	68135	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	10404	1.0000	0.88988	
65 Ethylbenzene	91.0	10.631	10.631	0.000	20269	1.0000	0.88059	
67 m+p-Xylenes	106.0	10.750	10.750	0.000	7734	1.0000	0.87354	
68 o-Xylene	106.0	11.128	11.128	0.000	7850	1.0000	0.89773	
69 Styrene	104.0	11.128	11.128	0.000	9581	1.0000	0.83057	
70 Bromoform	173.0	11.294	11.294	0.000	655	1.0000	0.74584	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	20143	1.0000	0.85834	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	1929	1.0000	0.92958	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	1811	1.0000	0.84343	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	7841	1.0000	0.89948	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	31118	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	7669	1.0000	0.92601	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	4506	1.0000	0.95850	
89 1,2-Dichlorobenzene	146.0	12.808	12.808	0.000	6554	1.0000	0.88338	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	178	1.0000	0.64927	M
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	4834	1.0000	0.87213	
94 1,2,3-Trichlorobenzene	180.0	14.276	14.276	0.000	3555	1.0000	0.87256	

QC Flag Legend

Review Flags

M - Compound Hit/Peak Manually Integrated



Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

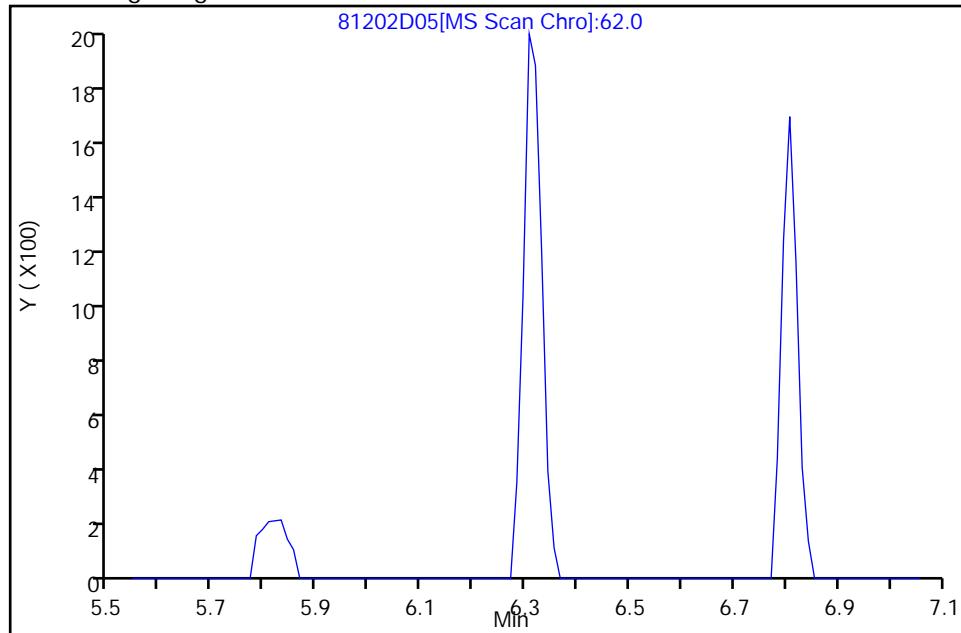
Manual Integration Report

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 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

39 1,2-Dichloroethane, CAS: 107-06-2

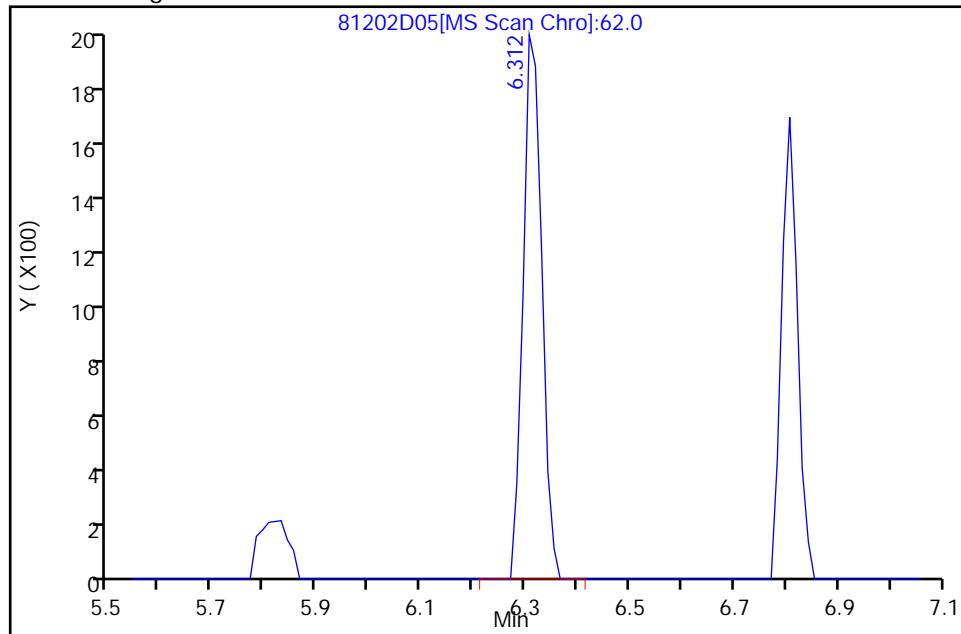
Not Detected
6.312

Processing Integration Results



RT: 6.312
 Response: 4720
 Amount: 0.93778

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:51:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

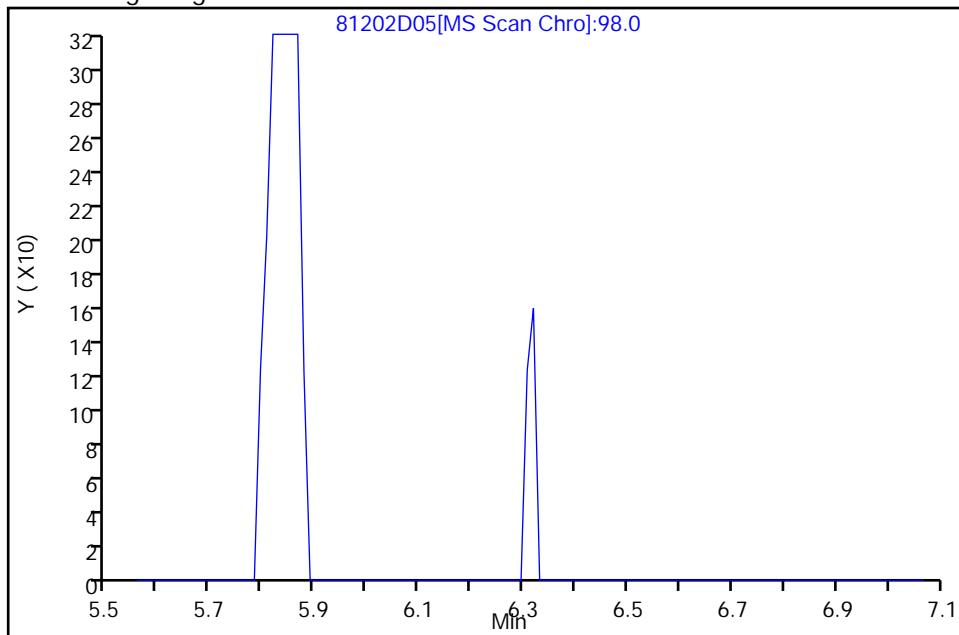
Manual Integration Report

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 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

39 1,2-Dichloroethane, CAS: 107-06-2

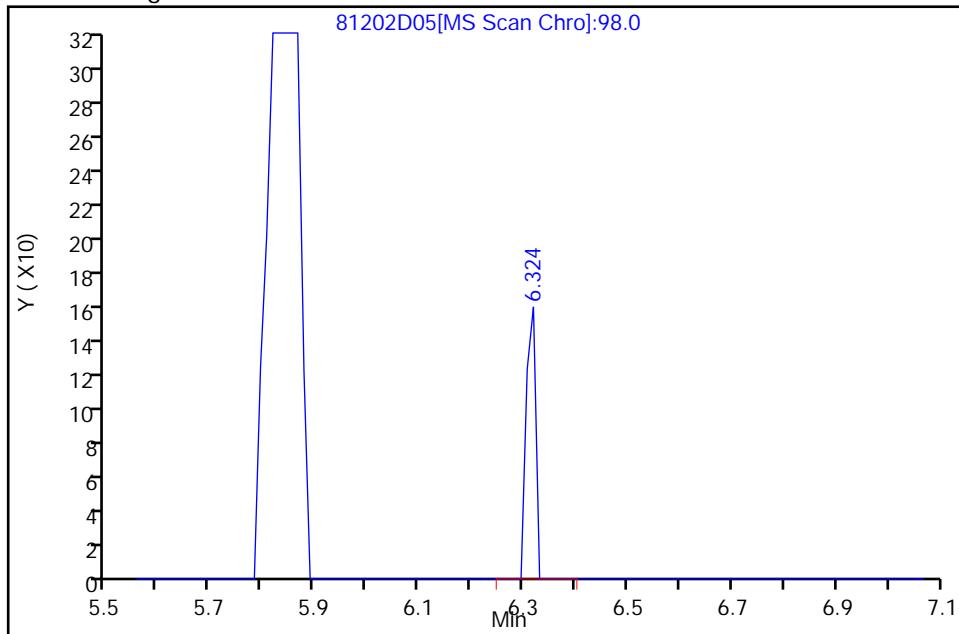
Not Detected
6.324

Processing Integration Results



RT: 6.324
 Response: 198
 Amount: 0.93778

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:51:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

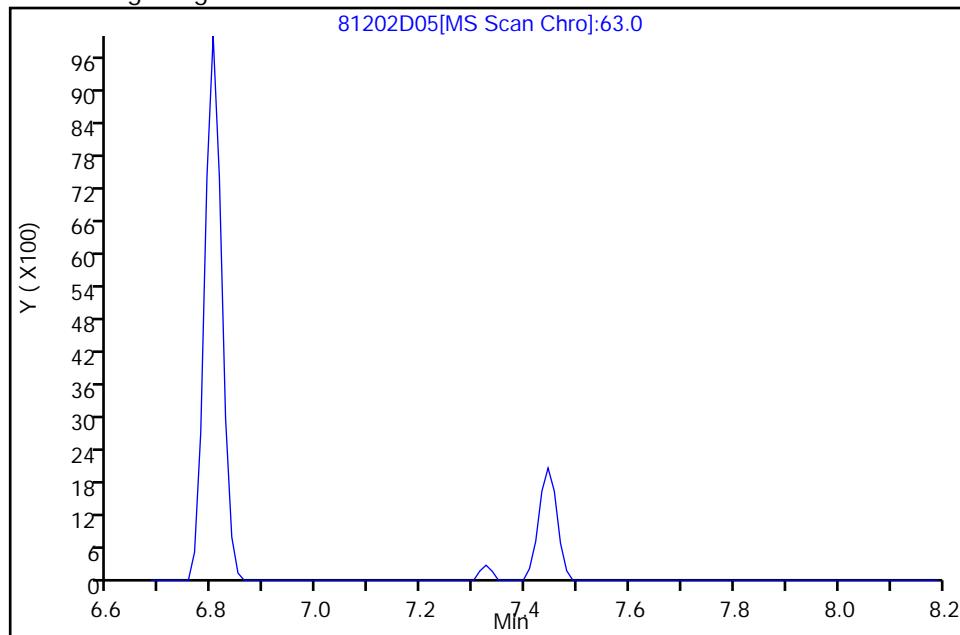
Manual Integration Report

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 Injection Date: 03-Dec-2014 01:25:30 Inst. ID: msd8.i
 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

45 1,2-Dichloropropane, CAS: 78-87-5

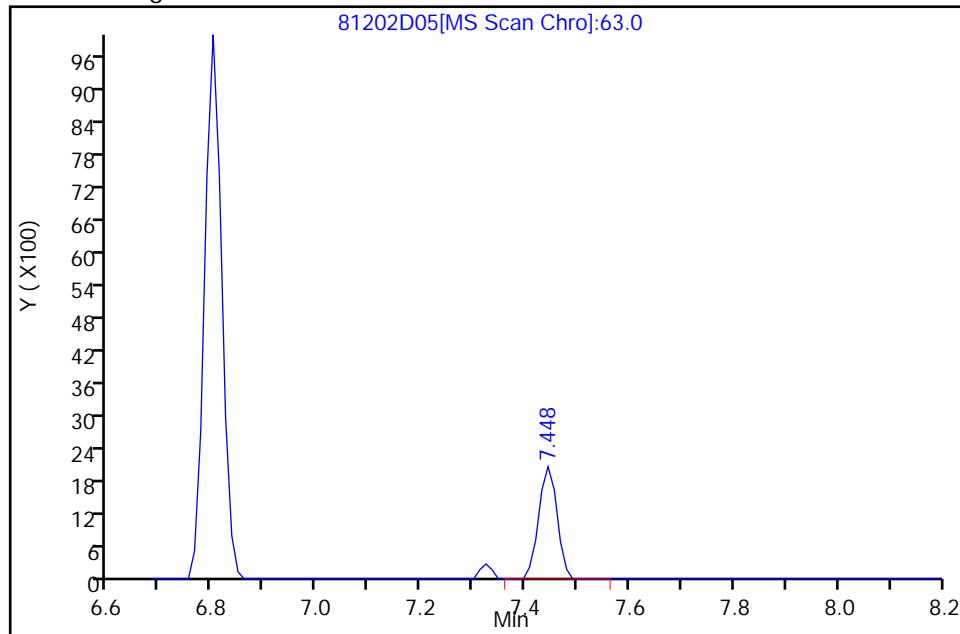
Not Detected
7.448

Processing Integration Results



RT: 7.448
 Response: 5024
 Amount: 0.96064

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

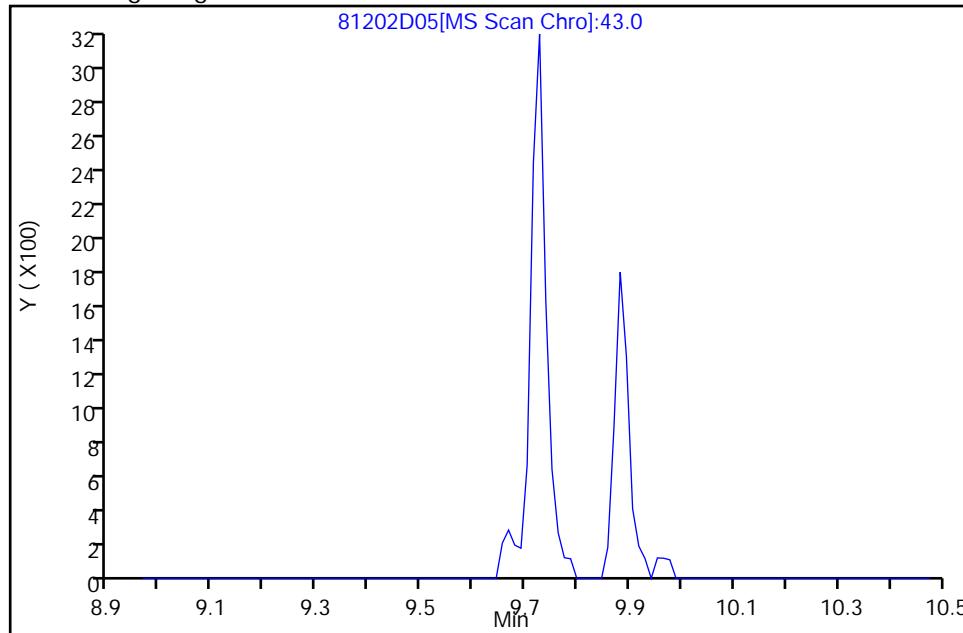
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D
 Injection Date: 03-Dec-2014 01:25:30 Inst. ID: msd8.i
 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

60 2-Hexanone, CAS: 591-78-6

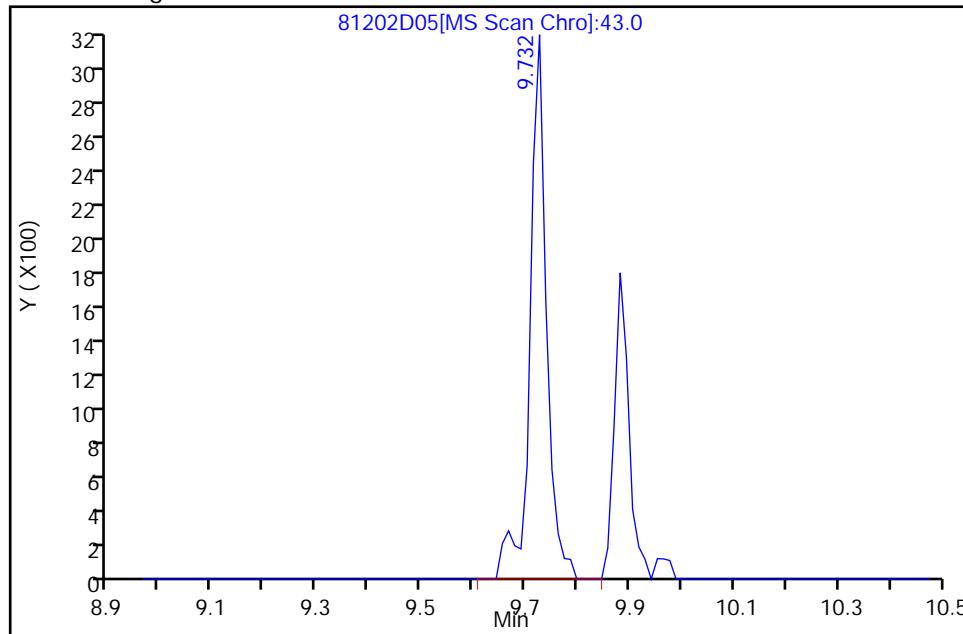
Not Detected
9.732

Processing Integration Results



RT: 9.732
 Response: 6953
 Amount: 9.5525

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

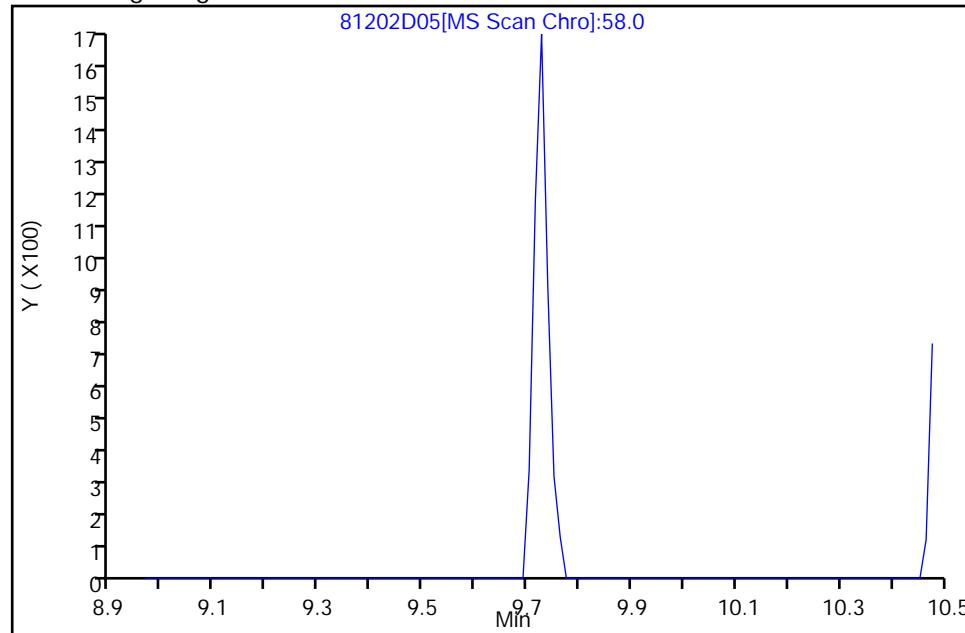
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D
 Injection Date: 03-Dec-2014 01:25:30 Inst. ID: msd8.i
 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

60 2-Hexanone, CAS: 591-78-6

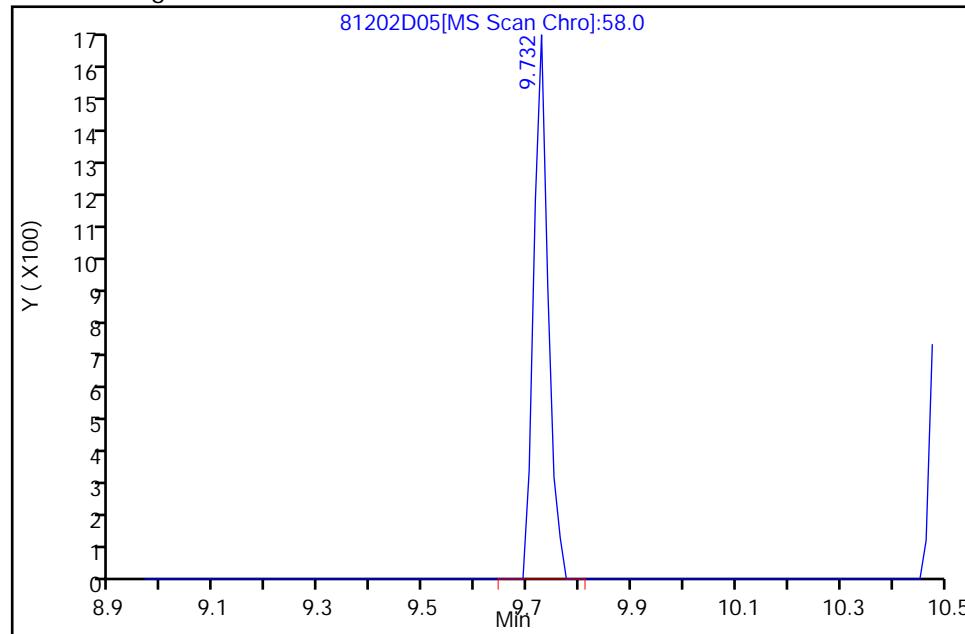
Not Detected
9.732

Processing Integration Results



RT: 9.732
 Response: 3166
 Amount: 9.5525

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

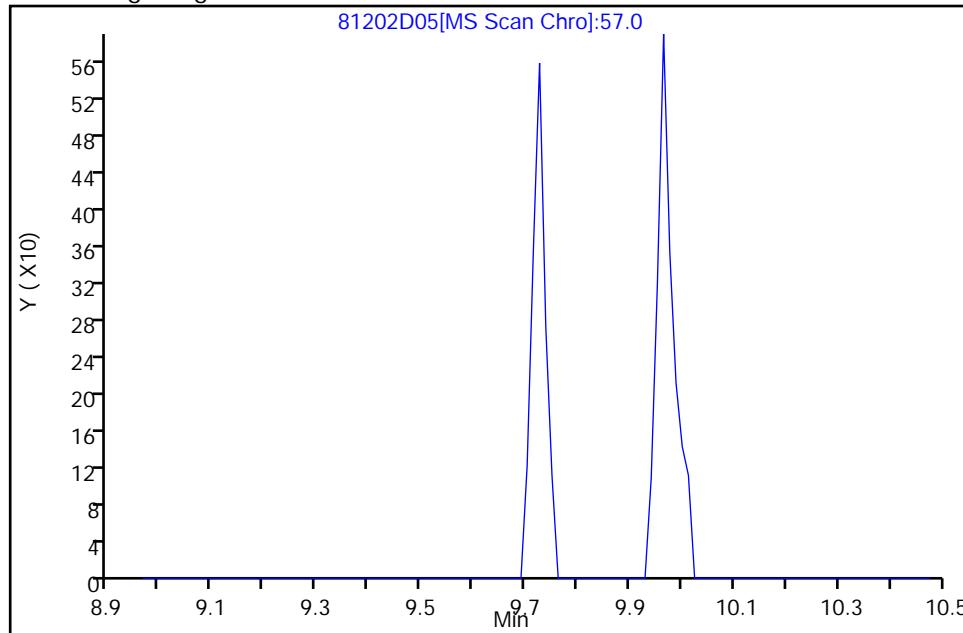
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D
 Injection Date: 03-Dec-2014 01:25:30 Inst. ID: msd8.i
 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

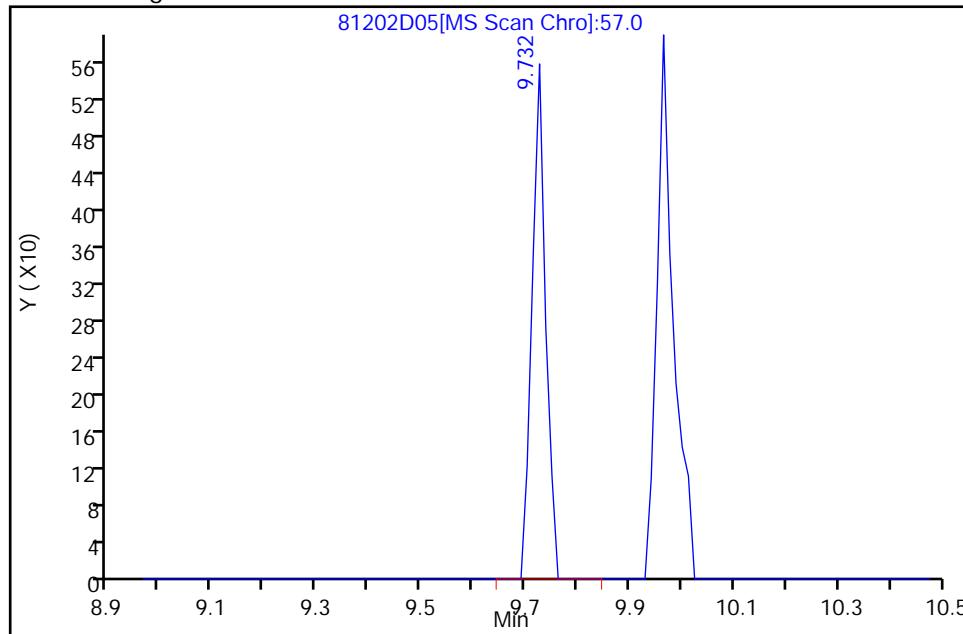
60 2-Hexanone, CAS: 591-78-6

Not Detected
9.732

Processing Integration Results



Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

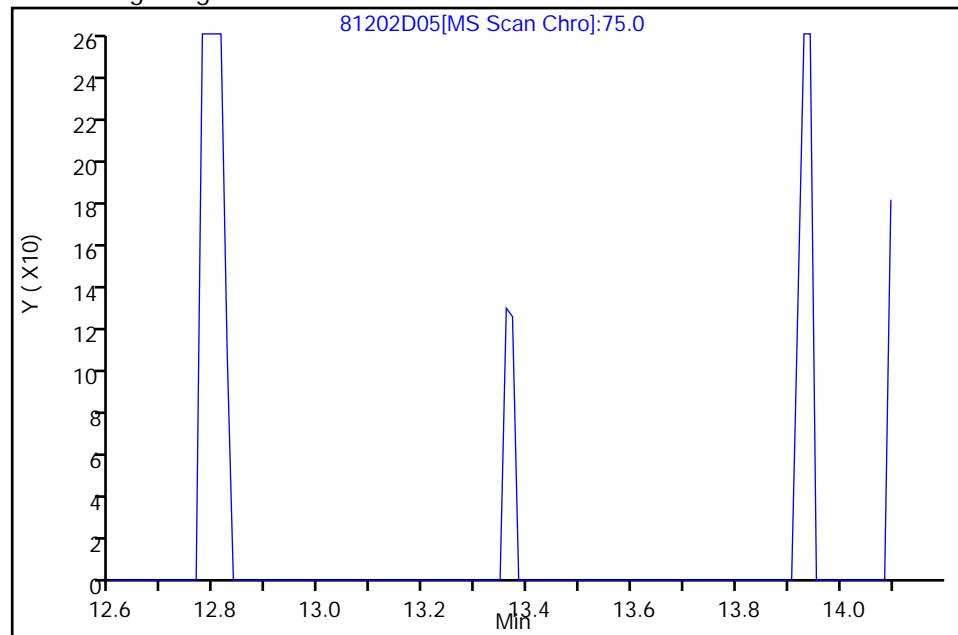
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D
 Injection Date: 03-Dec-2014 01:25:30 Inst. ID: msd8.i
 Client ID: VSTD001MV Lab ID: VSTD001MV
 Sample Info: 8120214D.b, VSTD001MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

90 1,2-Dibromo-3-chloropropane, CAS: 96-12-8

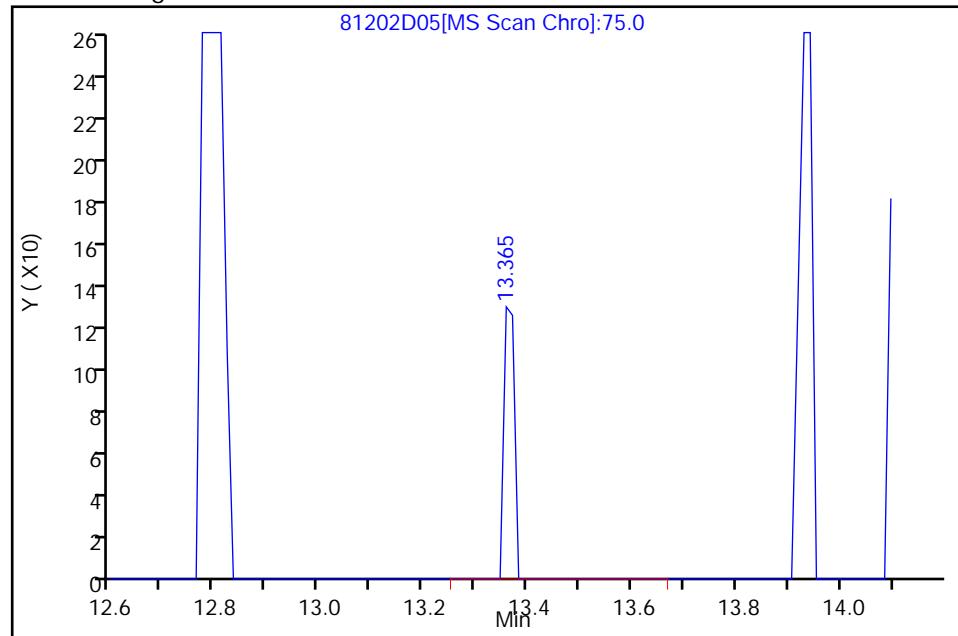
Not Detected
13.365

Processing Integration Results



RT: 13.365
 Response: 178
 Amount: 0.64927

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:31

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D05.D

Injection Date: 03-Dec-2014 01:25:30

Inst. ID: msd8.i

Client ID: VSTD001MV

Lab ID: VSTD001MV

Sample Info: 8120214D.b, VSTD001MV

Purge Vol. 25 ML

Dil. Factor: 1.0

Operator: PMM2

Column1: DB-624 (0.25 mm)

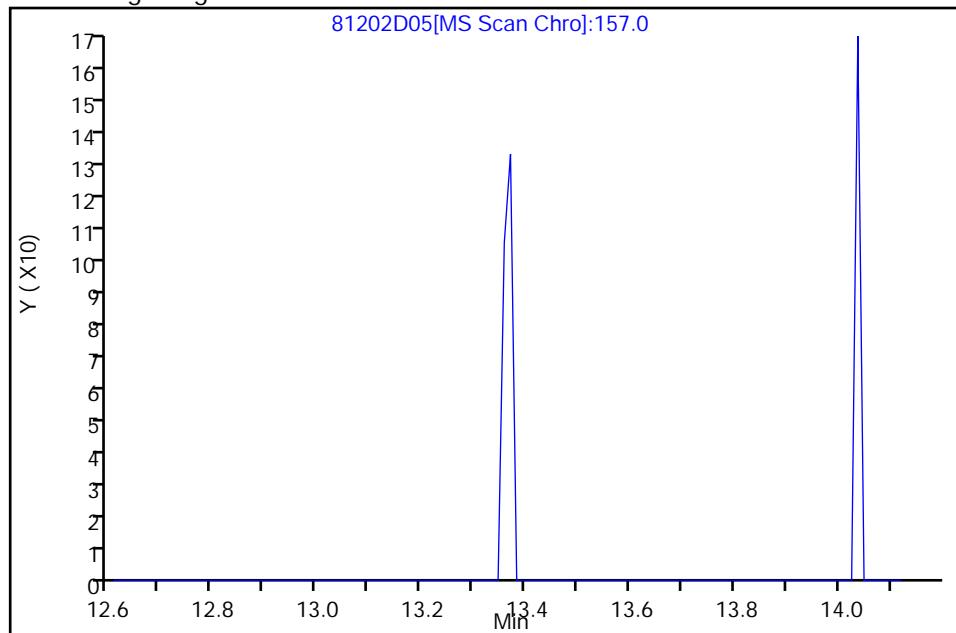
Detector: MS Scan

90 1,2-Dibromo-3-chloropropane, CAS: 96-12-8

Not Detected

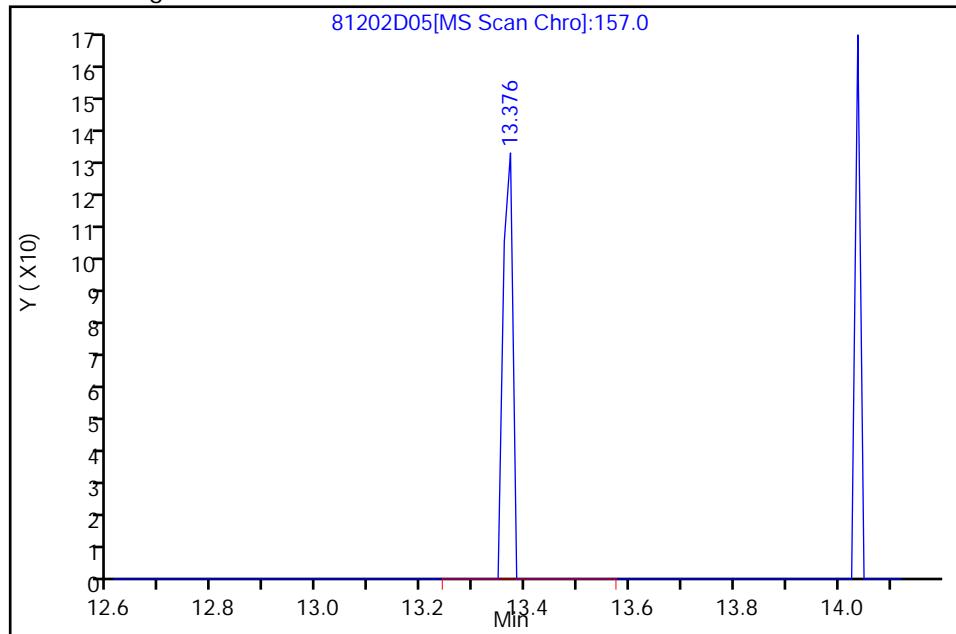
13.376

Processing Integration Results



RT: 13.376
Response: 165
Amount: 0.64927

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Lab Sample ID: VSTD0.5MV Client Sample ID: VSTD0.5MV
 Injection Date: 03-Dec-2014 01:53:30 Dil. Factor: 1.0
 Operator: PMM2 Inst. ID: msd8.i
 Sample Info: 8120214D.b, VSTD0.5MV
 Method: \\Organics\DD\chem\msd8.i\8120214D.b\TRACE-8.m
 Method Date: 03-Dec-2014 07:56:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Ical, Level: 1 ALS Bottle: 6
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 03-Dec-2014 07:54:30

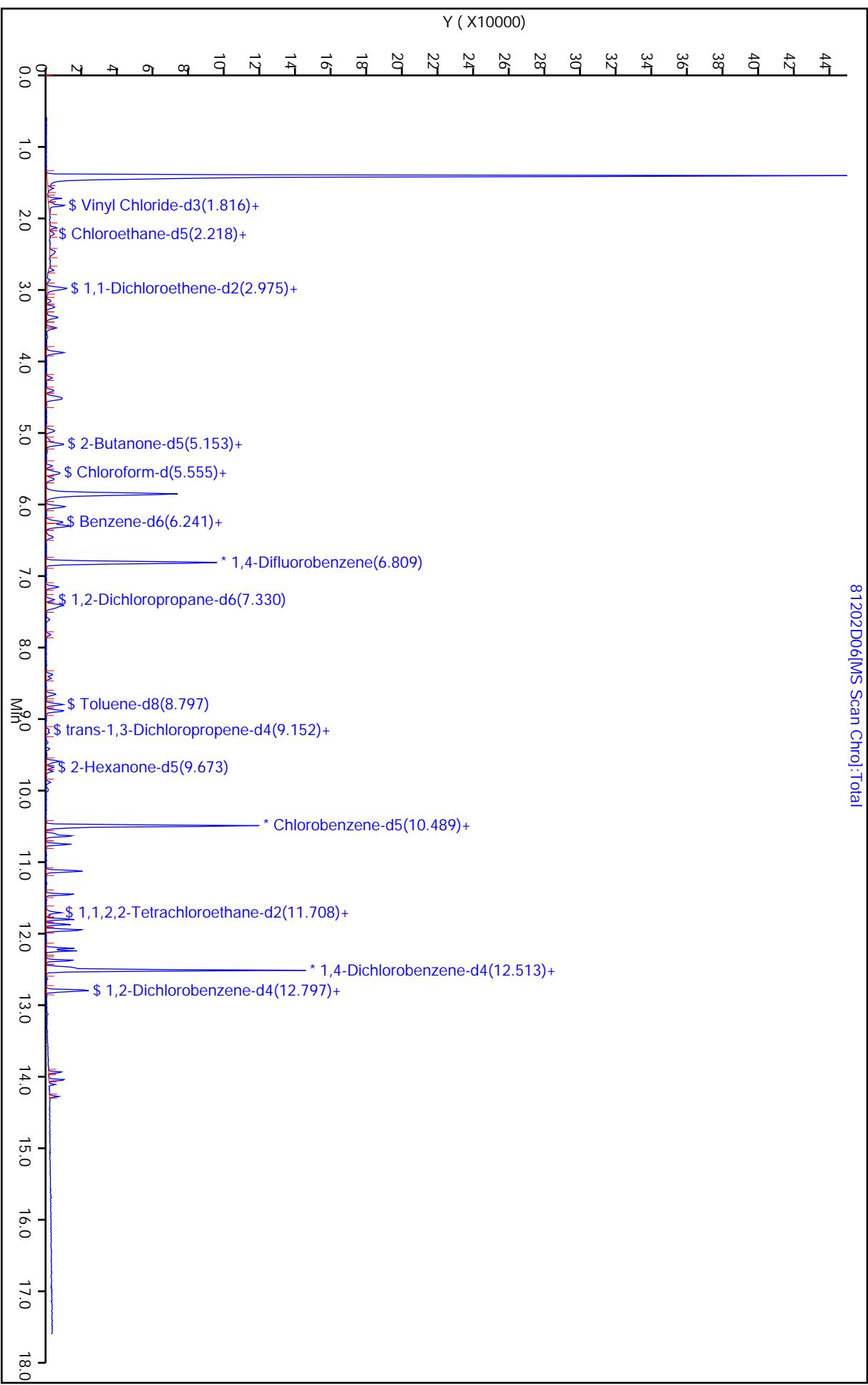
Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	3764	0.50000	0.52583	
2 Chloromethane	50.0	1.721	1.721	0.000	5139	0.50000	0.56870	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	3149	0.50000	0.56638	
4 Vinyl Chloride	62.0	1.827	1.827	0.000	4587	0.50000	0.56595	
5 Bromomethane	94.0	2.135	2.135	0.000	2494	0.50000	0.62060	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	1806	0.50000	0.54922	M
7 Chloroethane	64.0	2.218	2.218	0.000	1941	0.50000	0.56749	
8 Trichlorofluoromethane	101.0	2.466	2.466	0.000	3785	0.50000	0.52921	
\$ 12 1,1-Dichloroethene-d2	63.0	2.975	2.975	0.000	5909	0.50000	0.52253	
13 1,1-Dichloroethene	96.0	2.975	2.975	0.000	2618	0.50000	0.50461	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	2058	0.50000	0.47866	
14 Acetone	43.0	3.023	3.023	0.000	2151	5.0000	4.9805	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	8622	0.50000	0.51928	
16 Methyl Acetate	43.0	3.401	3.401	0.000	1055	0.50000	0.50572	
17 Methylene Chloride	84.0	3.531	3.531	0.000	3415	0.50000	0.61917	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	3516	0.50000	0.49731	M
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	3065	0.50000	0.50759	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	6186	0.50000	0.51749	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	3444	5.0000	4.4900	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	0.000	3107	0.50000	0.51143	
28 2-Butanone	43.0	5.176	5.176	0.000	3444	5.0000	5.2256	M
29 Bromochloromethane	128.0	5.460	5.460	0.000	729	0.50000	0.41124	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	5146	0.50000	0.50628	
31 Chloroform	83.0	5.579	5.579	0.000	5522	0.50000	0.53439	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	3682	0.50000	0.51242	
32 Cyclohexane	56.0	5.886	5.886	0.000	6497	0.50000	0.58511	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	2648	0.50000	0.45618	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.229	6.218	0.000	1843	0.50000	0.48714	M
\$ 36 Benzene-d6	84.0	6.253	6.253	0.000	10618	0.50000	0.53642	
37 Benzene	78.0	6.300	6.300	0.000	11764	0.50000	0.52846	
39 1,2-Dichloroethane	62.0	6.324	6.324	0.000	2375	0.50000	0.50950	M
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	91787	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	2899	0.50000	0.50133	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	3157	0.50000	0.57112	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	4700	0.50000	0.47988	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	2338	0.50000	0.48632	M
49 Bromodichloromethane	83.0	7.815	7.815	0.000	2186	0.50000	0.47281	M
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	2034	0.50000	0.40317	
51 4-Methyl-2-pentanone	43.0	8.655	8.655	0.000	5569	5.0000	4.6933	M
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	7879	0.50000	0.49598	M
53 Toluene	91.0	8.880	8.880	0.000	9437	0.50000	0.48350	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	1279	0.50000	0.43584	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	1190	0.50000	0.38829	
56 1,1,2-Trichloroethane	97.0	9.424	9.424	0.000	803	0.50000	0.45404	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	1747	0.50000	0.46272	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	1769	5.0000	4.3842	
60 2-Hexanone	43.0	9.732	9.732	0.000	3121	5.0000	4.6793	M
61 Dibromochloromethane	129.0	9.874	9.874	0.000	729	0.50000	0.40628	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	723	0.50000	0.44426	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	61165	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	5397	0.50000	0.50584	
65 Ethylbenzene	91.0	10.631	10.631	0.000	10222	0.50000	0.48682	
67 m+p-Xylenes	106.0	10.749	10.749	0.000	4022	0.50000	0.49448	
68 o-Xylene	106.0	11.128	11.128	0.000	3695	0.50000	0.46743	
69 Styrene	104.0	11.140	11.140	0.000	4427	0.50000	0.43027	
70 Bromoform	173.0	11.306	11.294	0.000	226	0.50000	0.30681	M
71 Isopropylbenzene	105.0	11.448	11.448	0.000	9884	0.50000	0.46524	M
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	853	0.50000	0.44754	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	876	0.50000	0.46327	M
83 1,3-Dichlorobenzene	146.0	12.465	12.536	0.000	3888	0.50000	0.49191	M
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	28783	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	3765	0.50000	0.49990	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	2212	0.50000	0.48713	
89 1,2-Dichlorobenzene	146.0	12.808	12.536	0.000	3306	0.50000	0.49410	M
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	77	0.50000	0.35663	M
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	2254	0.50000	0.45807	
94 1,2,3-Trichlorobenzene	180.0	13.944	13.944	0.000	2254	0.50000	0.57923	

QC Flag Legend

Review Flags

M - Compound Hit/Peak Manually Integrated



Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

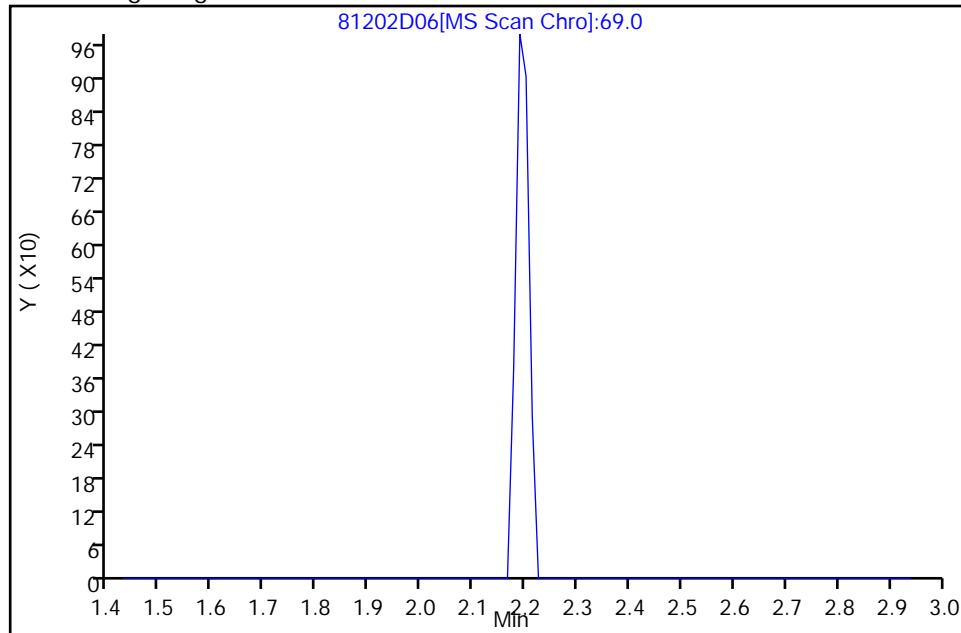
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\l8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

\$ 6 Chloroethane-d5, CAS: 19199-91-8

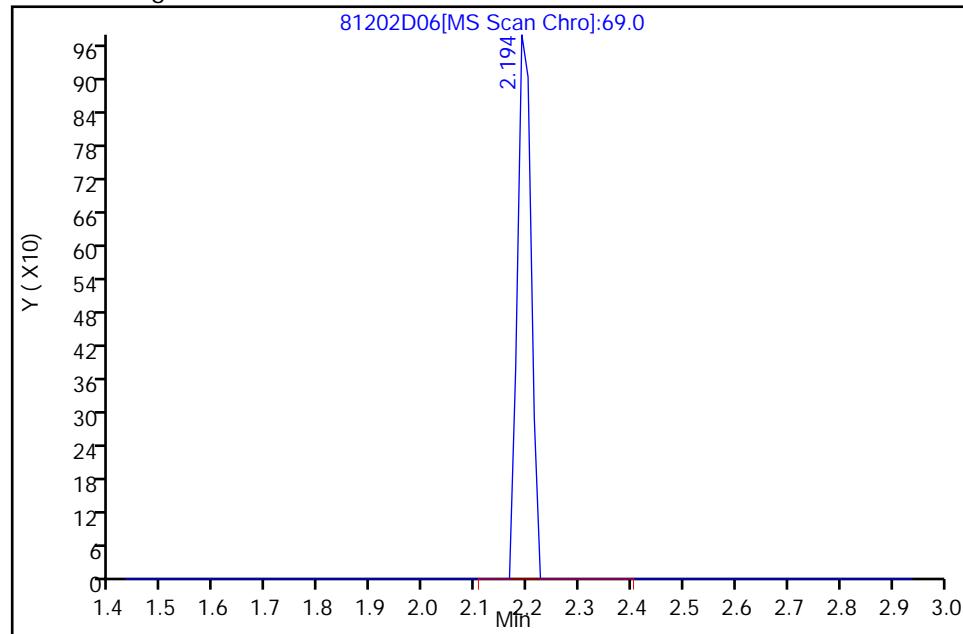
Not Detected
2.194

Processing Integration Results



RT: 2.194
 Response: 1806
 Amount: 0.54922

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

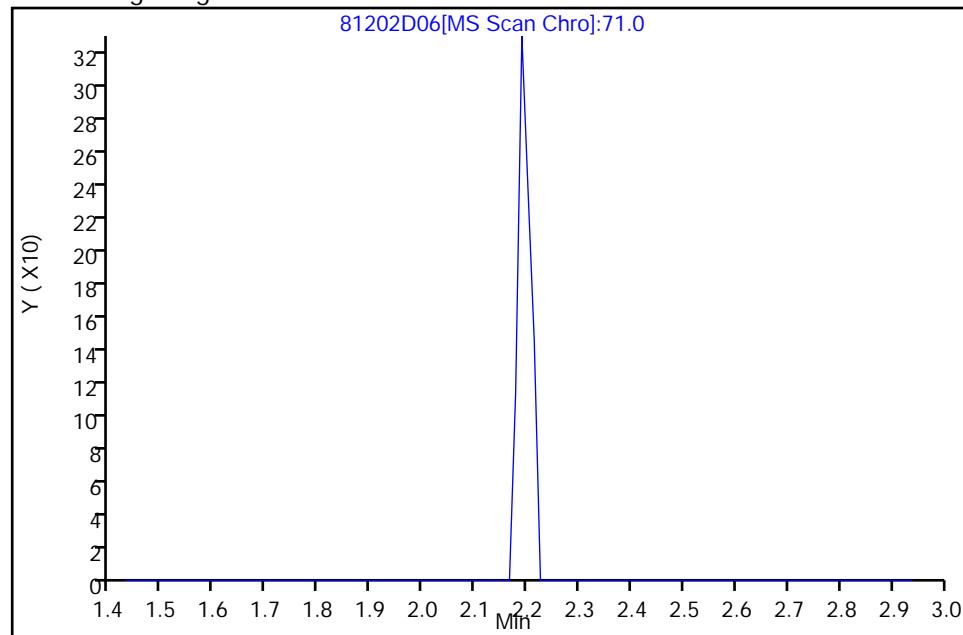
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

\$ 6 Chloroethane-d5, CAS: 19199-91-8

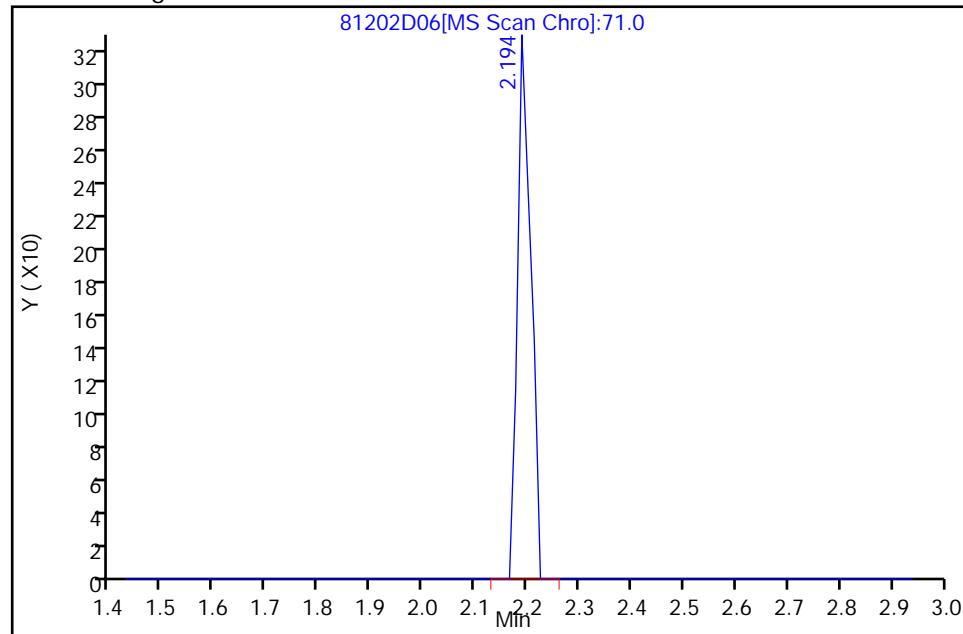
Not Detected
2.194

Processing Integration Results



RT: 2.194
 Response: 573
 Amount: 0.54922

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

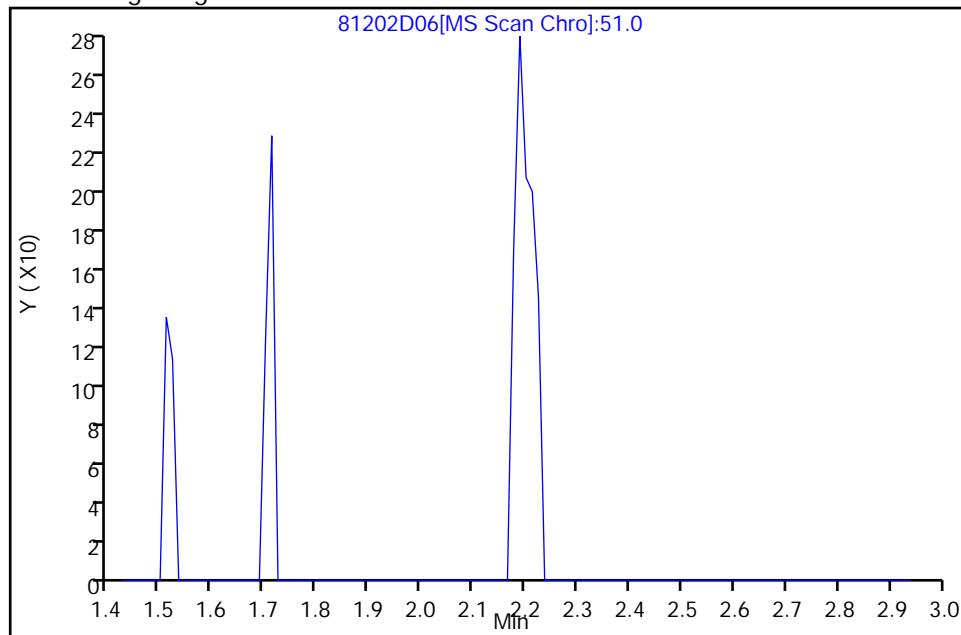
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

\$ 6 Chloroethane-d5, CAS: 19199-91-8

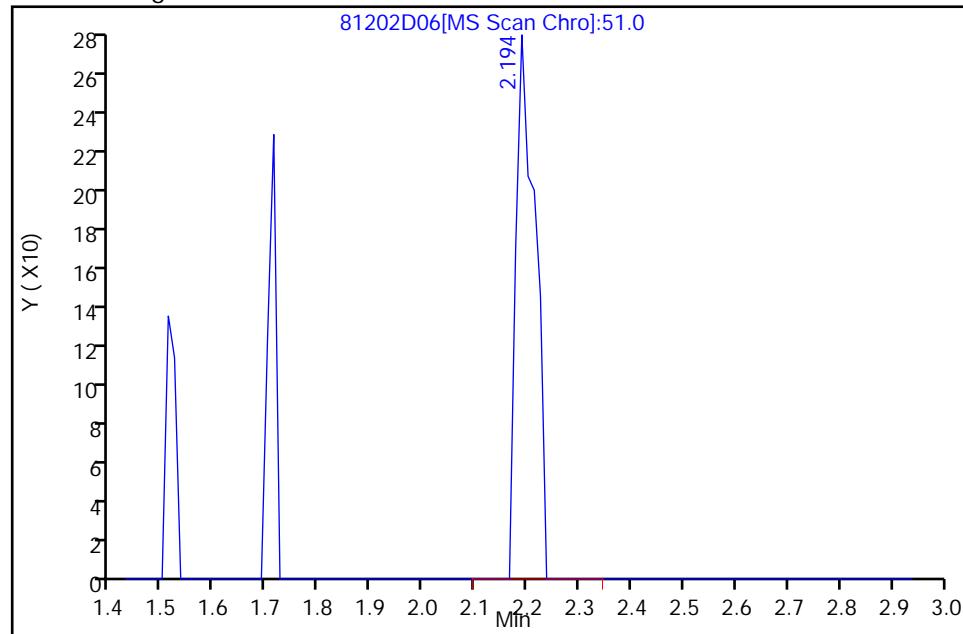
Not Detected
2.194

Processing Integration Results



RT: 2.194
 Response: 694
 Amount: 0.54922

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:52:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

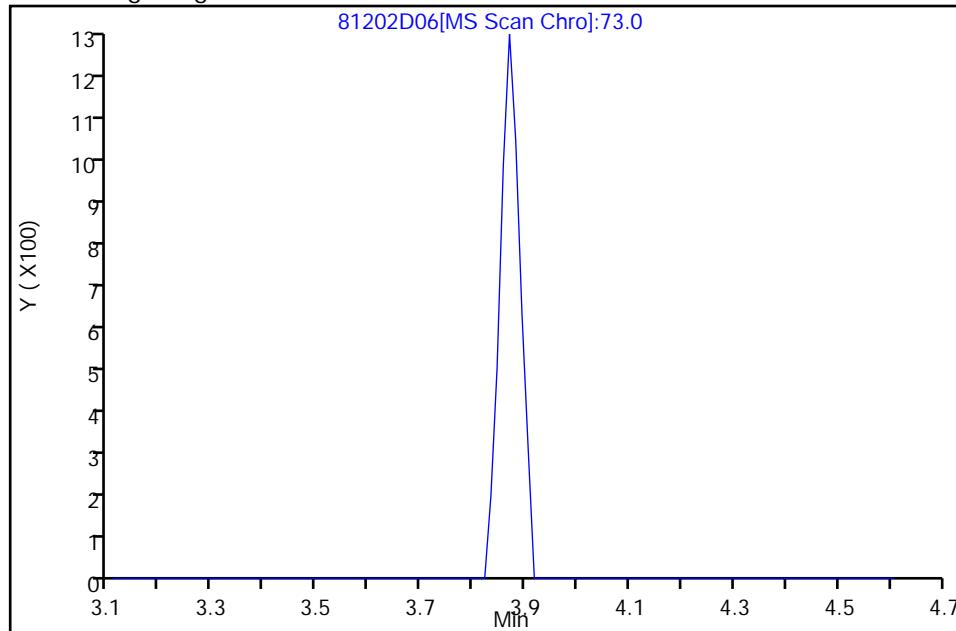
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
Sample Info: 8120214D.b, VSTD0.5MV
Purge Vol. 25 ML Dil. Factor: 1.0
Operator: PMM2 Detector: MS Scan
Column1: DB-624 (0.25 mm)

20 Methyl tert-Butyl Ether, CAS: 1634-04-4

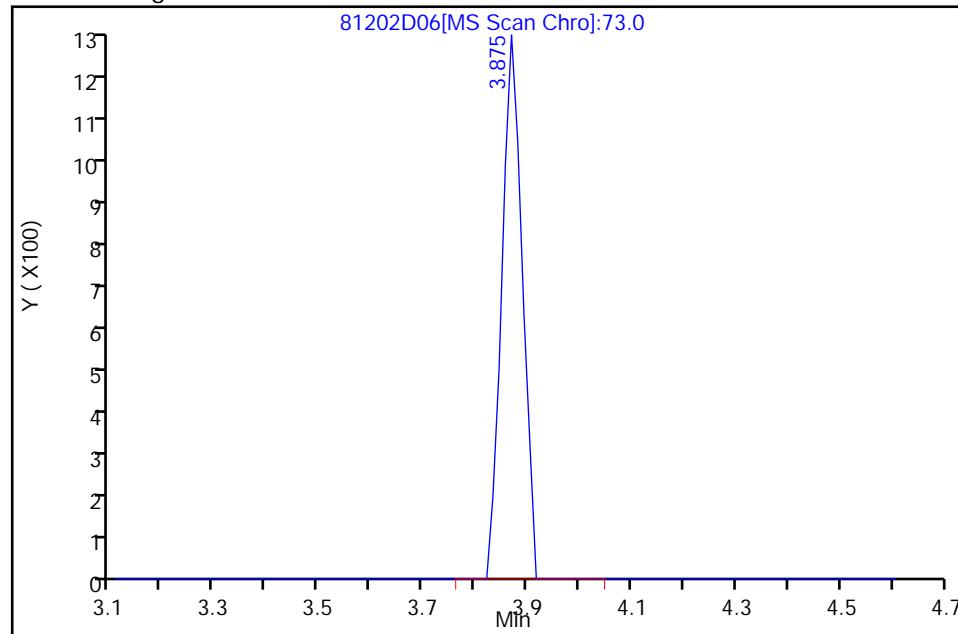
Not Detected
3.875

Processing Integration Results



RT: 3.875
Response: 3516
Amount: 0.49731

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

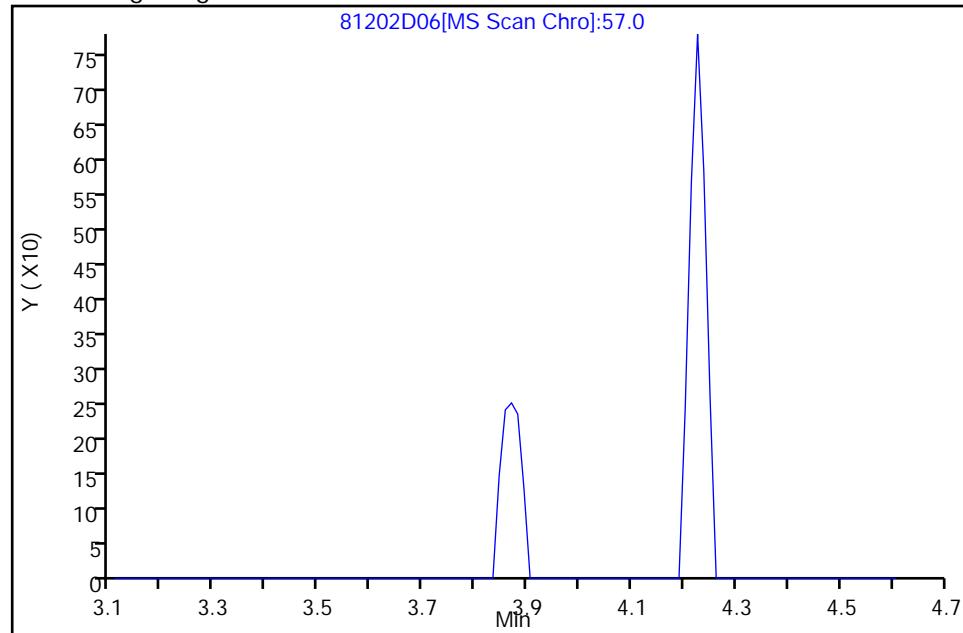
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

20 Methyl tert-Butyl Ether, CAS: 1634-04-4

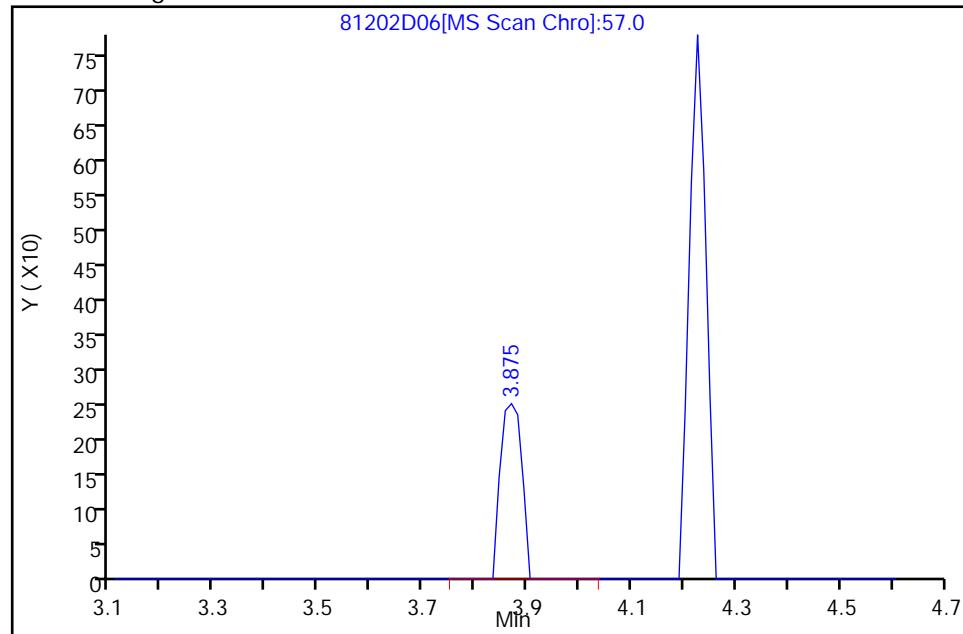
Not Detected
3.875

Processing Integration Results



RT: 3.875
 Response: 711
 Amount: 0.49731

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector:

Operator: PMM2

Column1: DB-624 (0.25 mm)

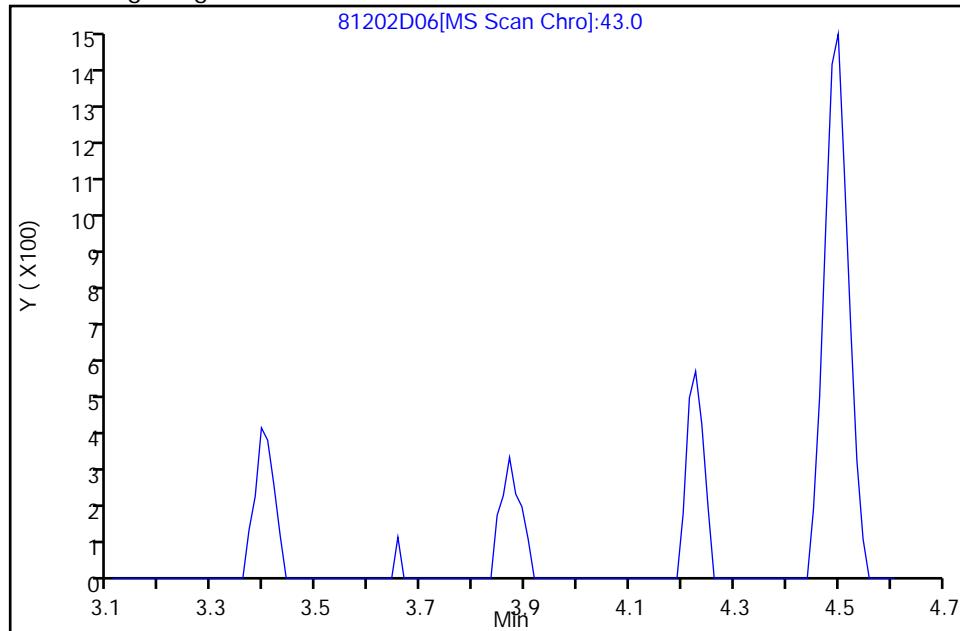
MS Scan

20 Methyl tert-Butyl Ether, CAS: 1634-04-4

Not Detected

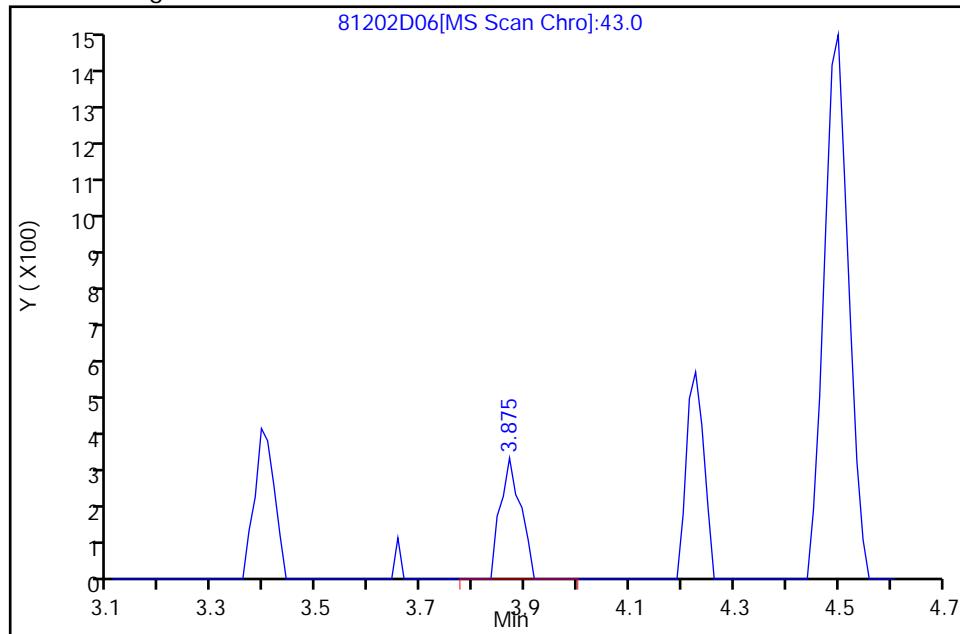
3.875

Processing Integration Results



RT: 3.875
 Response: 875
 Amount: 0.49731

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector: MS Scan

Operator: PMM2

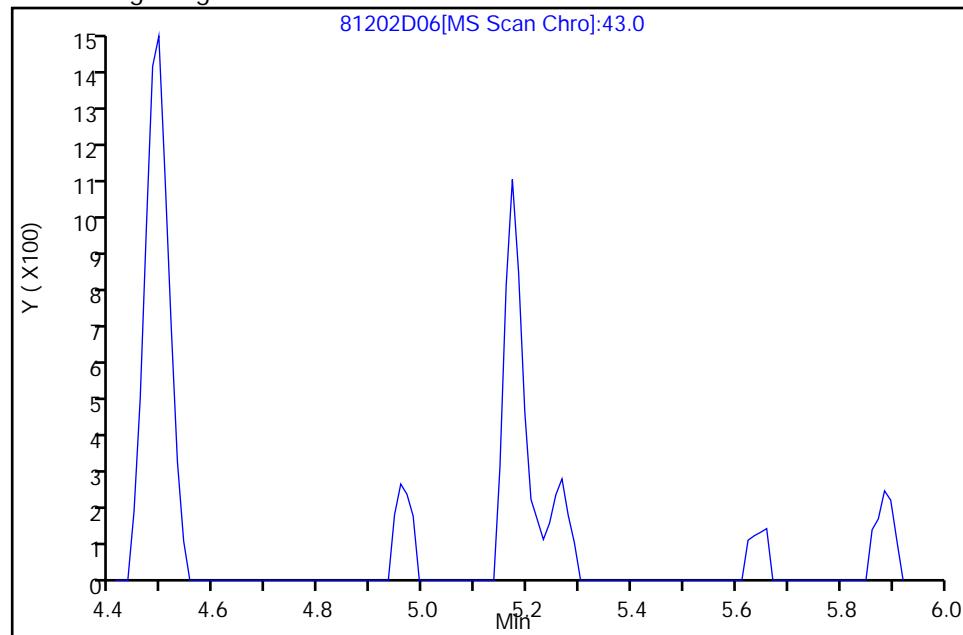
Column1: DB-624 (0.25 mm)

28 2-Butanone, CAS: 78-93-3

Not Detected

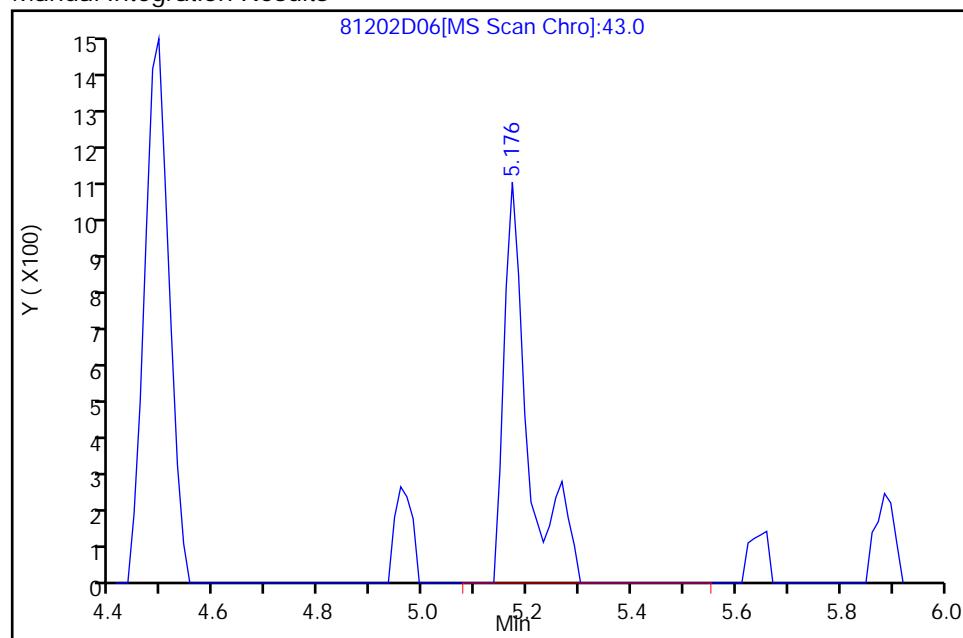
5.176

Processing Integration Results



RT: 5.176
Response: 3444
Amount: 5.2256

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

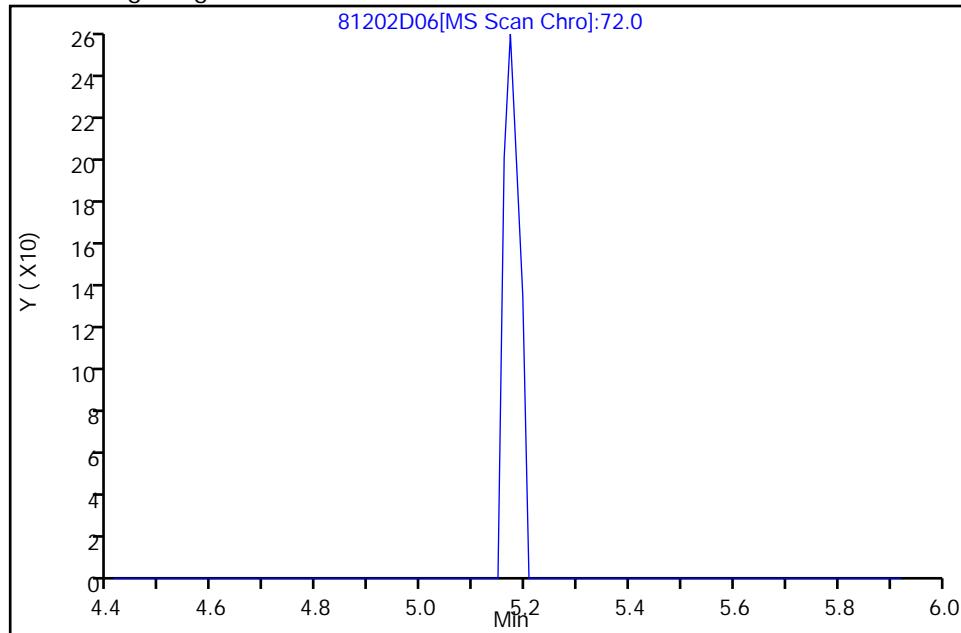
Manual Integration Report

Data File:	\Organics\DD\chem\msd8.\8120214D.b\81202D06.D		
Injection Date:	03-Dec-2014 01:53:30	Inst. ID:	msd8.i
Client ID:	VSTD0.5MV	Lab ID:	VSTD0.5MV
Sample Info:	8120214D.b, VSTD0.5MV		
Purge Vol.	25 ML	Dil. Factor:	1.0
Operator:	PMM2	Detector:	MS Scan
Column1:	DB-624 (0.25 mm)		

28 2-Butanone, CAS: 78-93-3

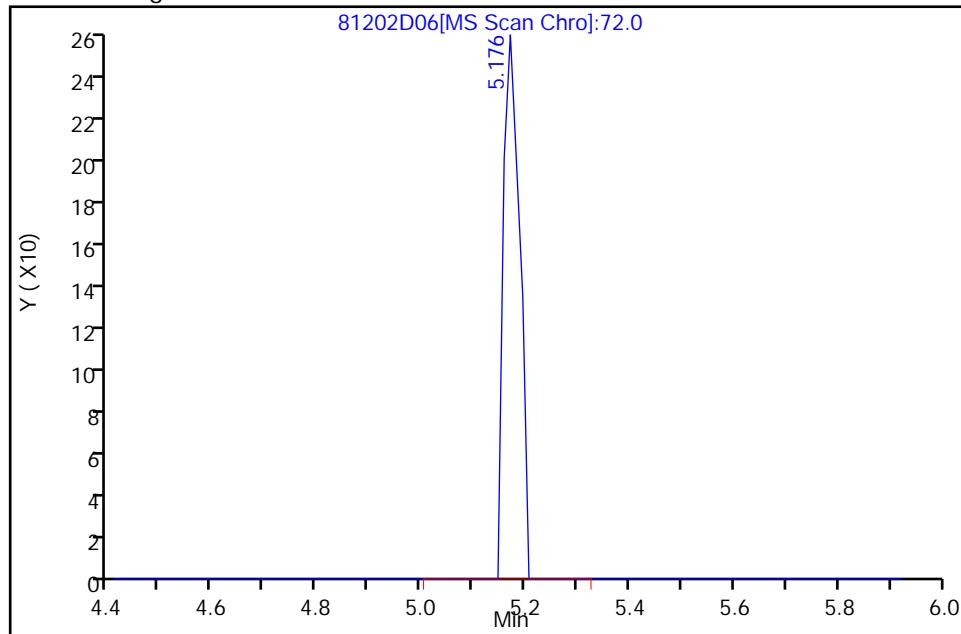
Not Detected
5.176

Processing Integration Results



RT: 5.176
Response: 563
Amount: 5.2256

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

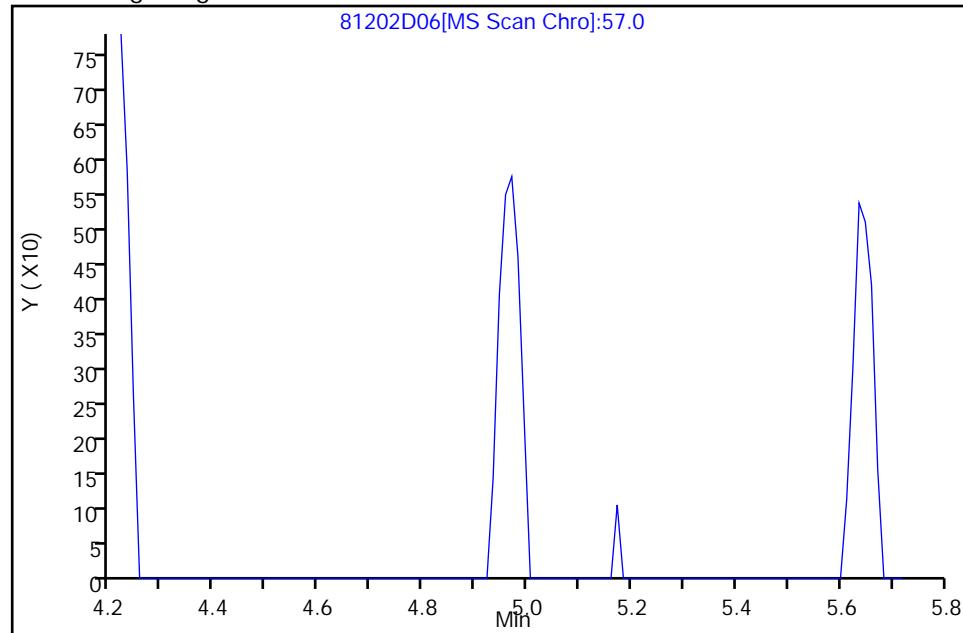
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

28 2-Butanone, CAS: 78-93-3

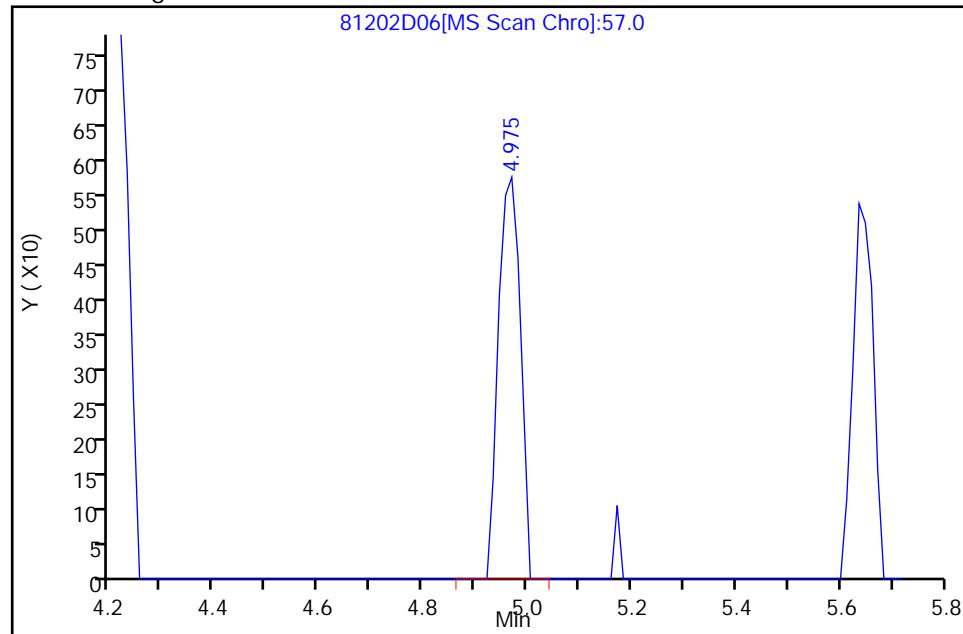
Not Detected
4.975

Processing Integration Results



RT: 4.975
 Response: 1676
 Amount: 5.2256

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

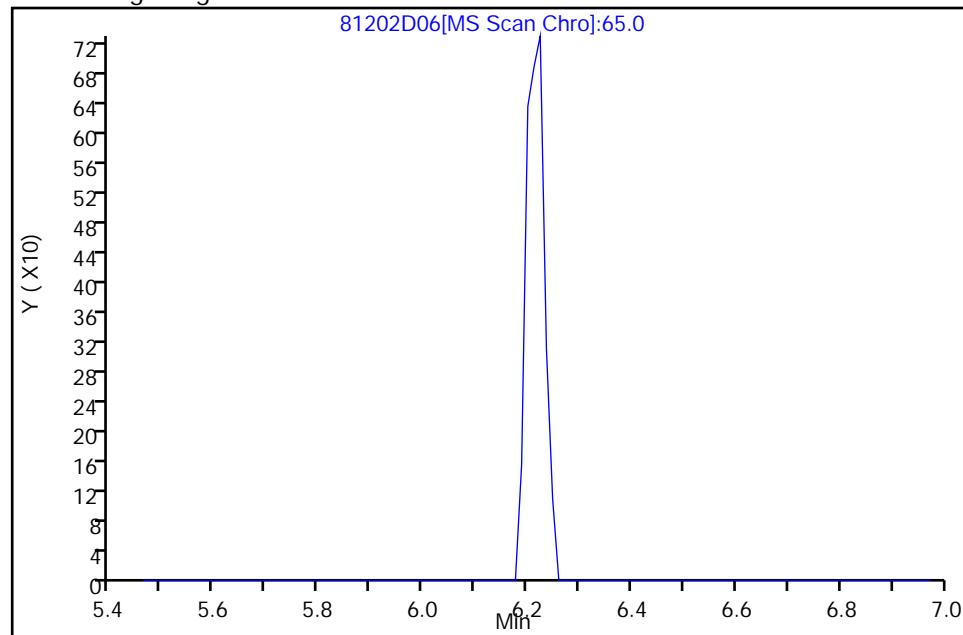
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

\$ 38 1,2-Dichloroethane-d4, CAS: 17060-07-0

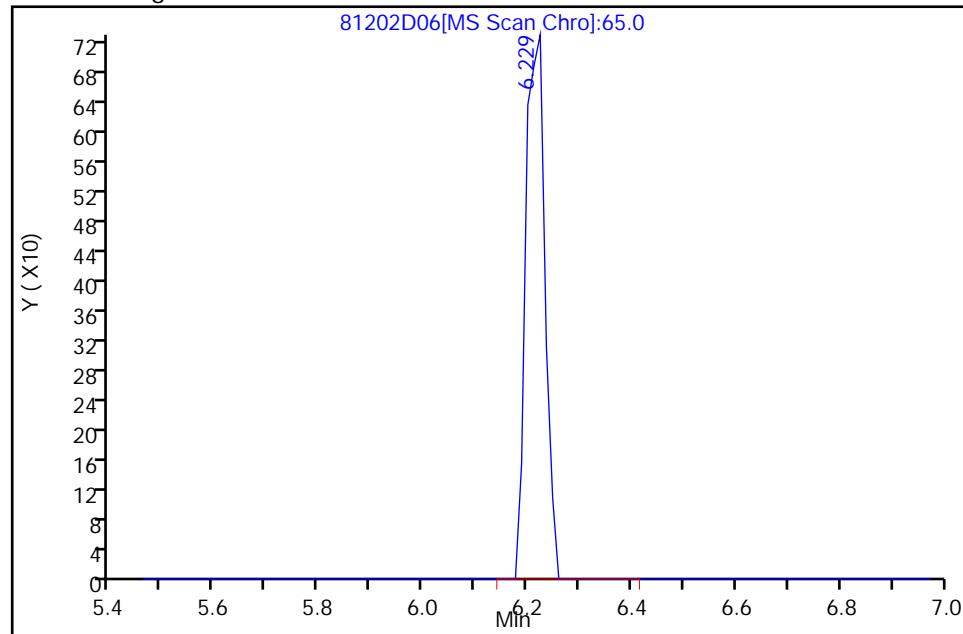
Not Detected
6.229

Processing Integration Results



RT: 6.229
 Response: 1843
 Amount: 0.48714

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

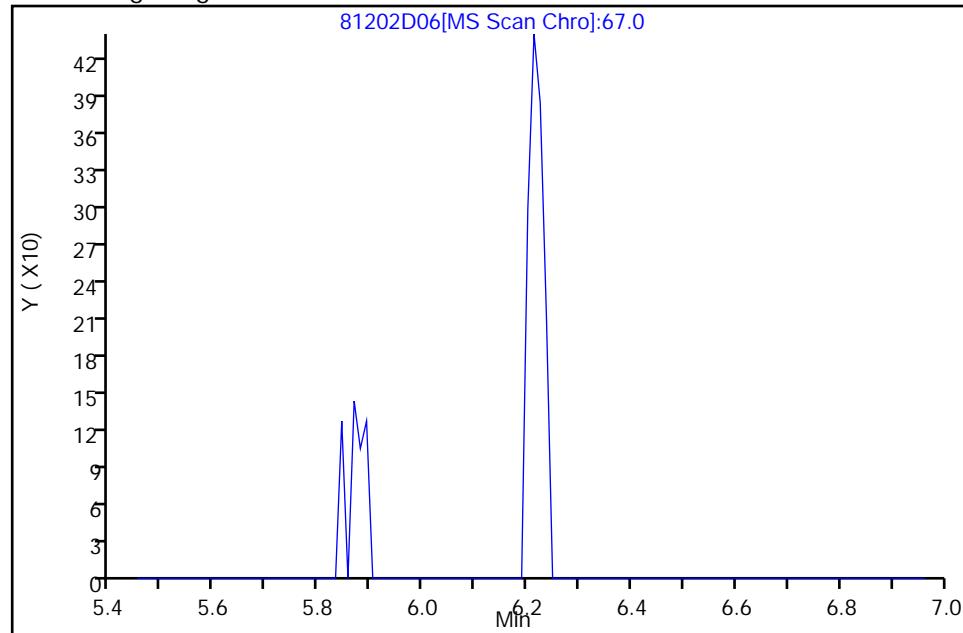
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

\$ 38 1,2-Dichloroethane-d4, CAS: 17060-07-0

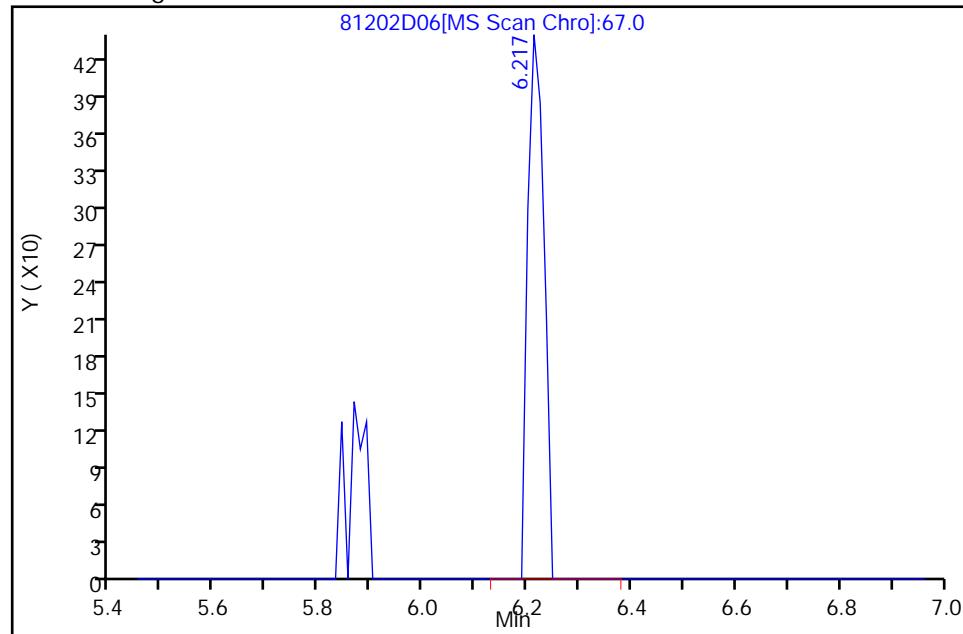
Not Detected
6.217

Processing Integration Results



RT: 6.217
 Response: 939
 Amount: 0.48714

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector: MS Scan

Operator: PMM2

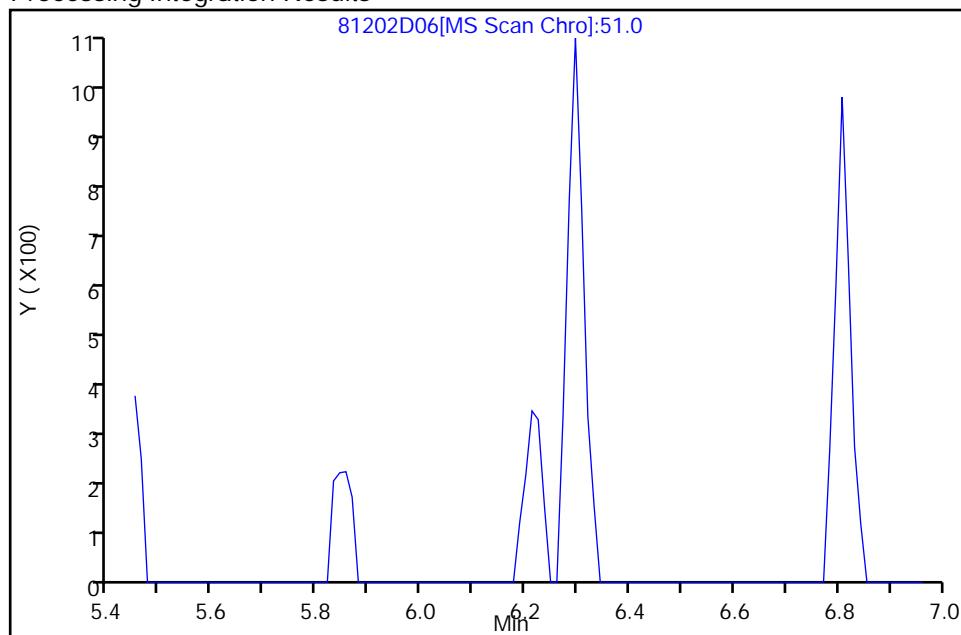
Column1: DB-624 (0.25 mm)

\$ 38 1,2-Dichloroethane-d4, CAS: 17060-07-0

Not Detected

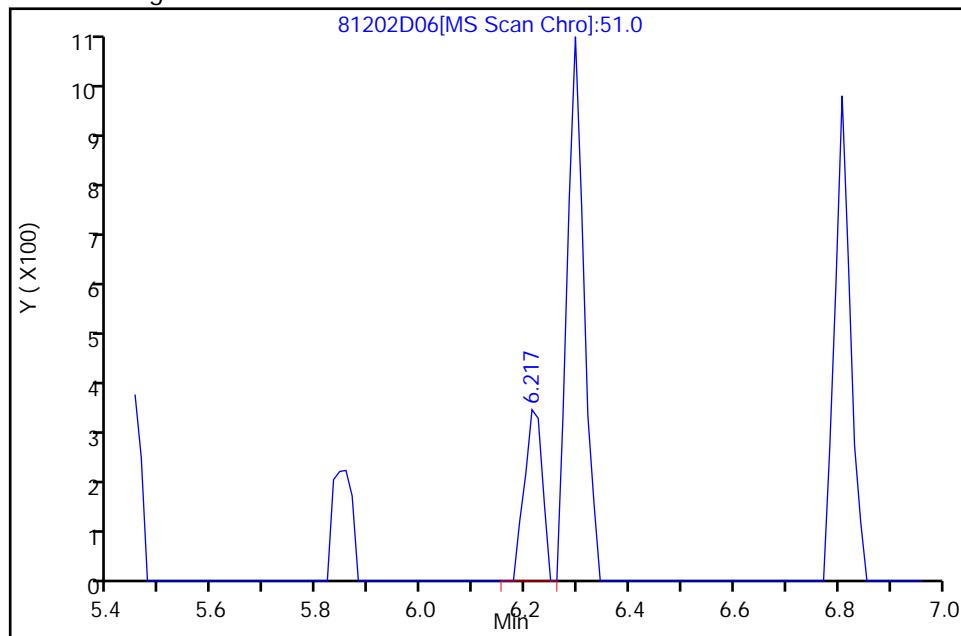
6.217

Processing Integration Results



RT: 6.217
 Response: 755
 Amount: 0.48714

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

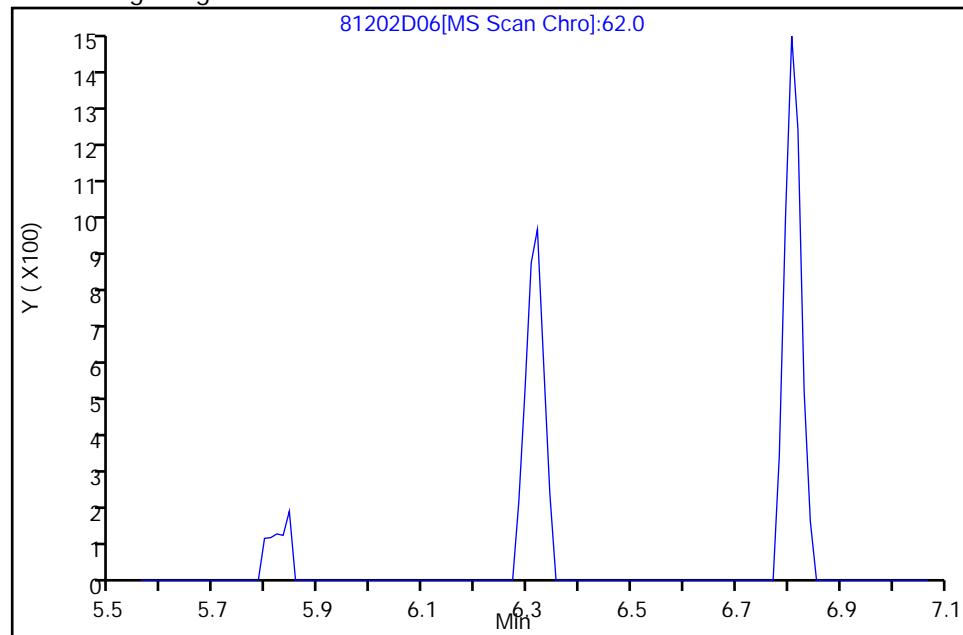
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

39 1,2-Dichloroethane, CAS: 107-06-2

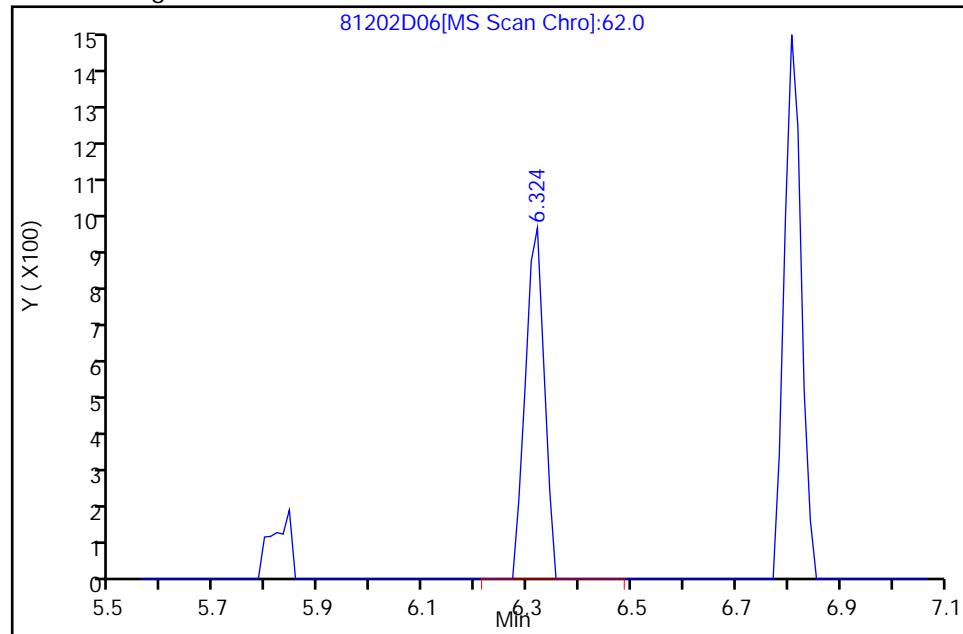
Not Detected
6.324

Processing Integration Results



RT: 6.324
 Response: 2375
 Amount: 0.50950

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

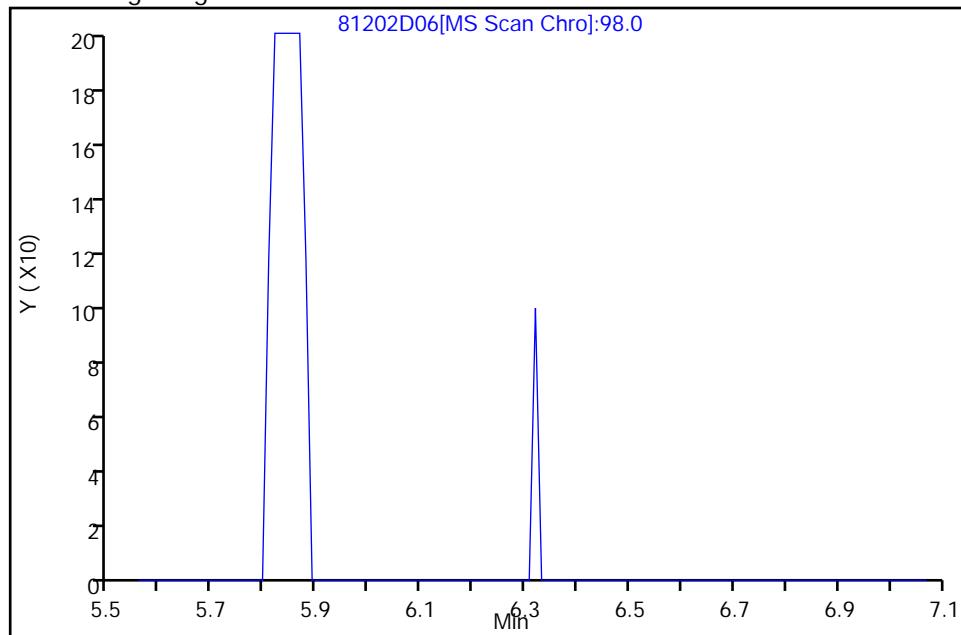
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

39 1,2-Dichloroethane, CAS: 107-06-2

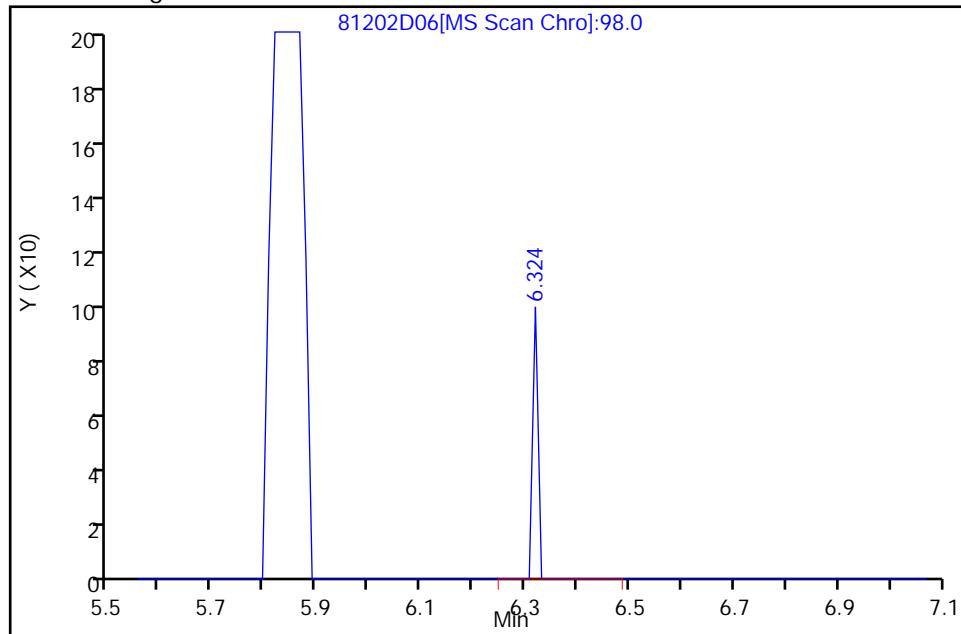
Not Detected
6.324

Processing Integration Results



RT: 6.324
 Response: 70
 Amount: 0.50950

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

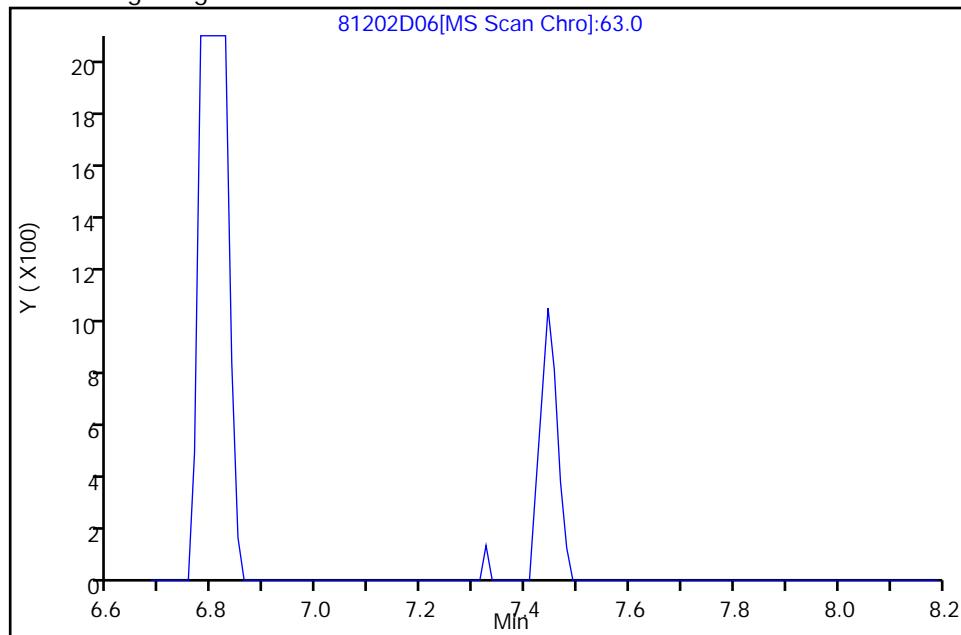
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\l8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

45 1,2-Dichloropropane, CAS: 78-87-5

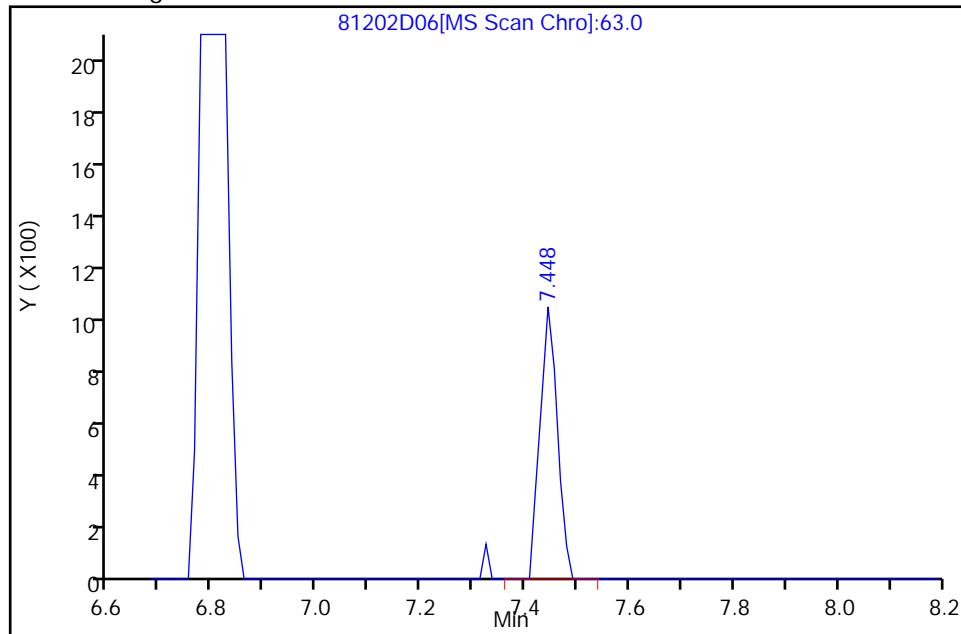
Not Detected
7.448

Processing Integration Results



RT: 7.448
 Response: 2338
 Amount: 0.48632

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

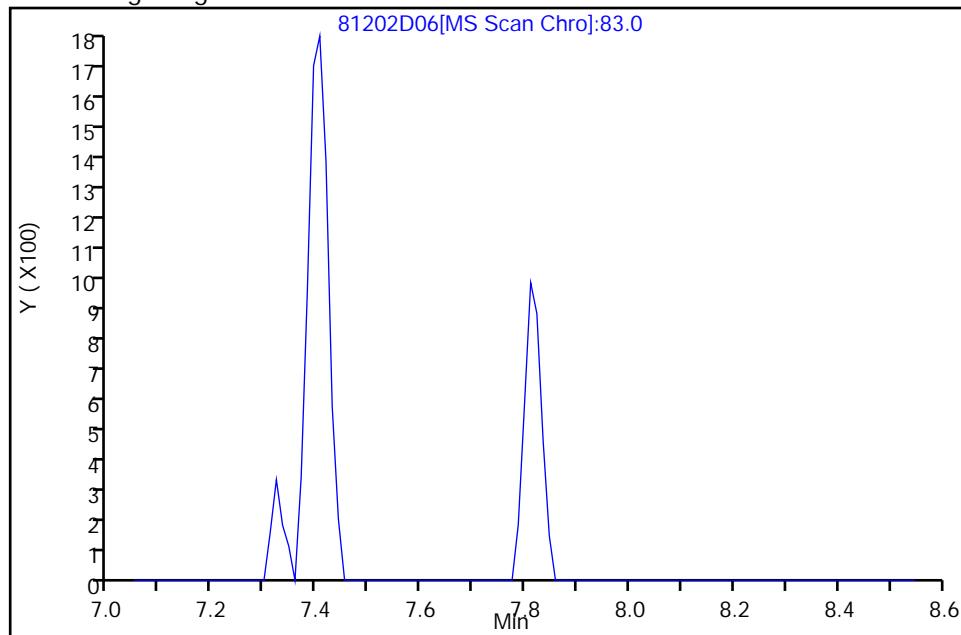
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

49 Bromodichloromethane, CAS: 75-27-4

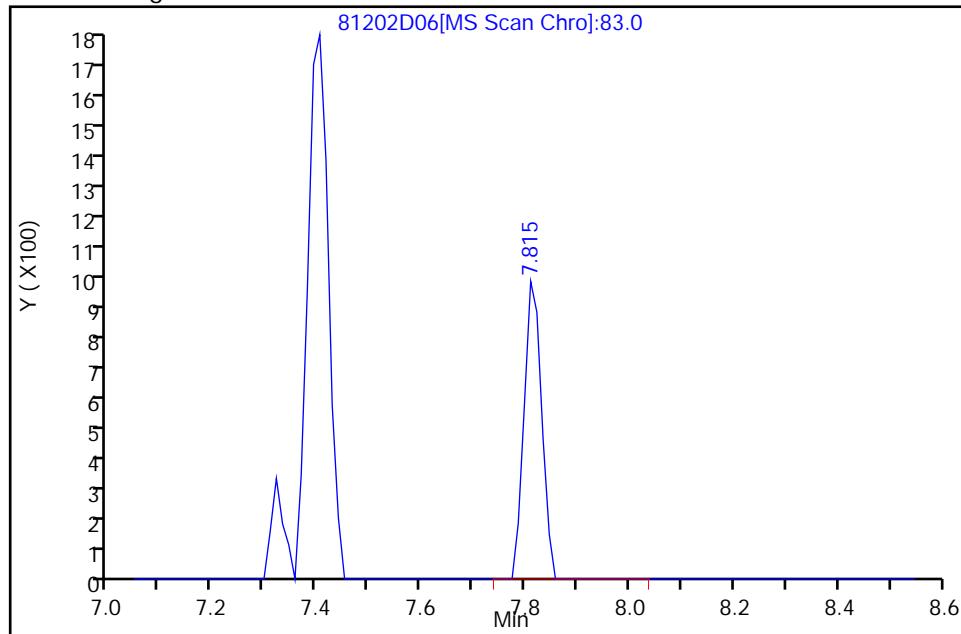
Not Detected
7.815

Processing Integration Results



RT: 7.815
 Response: 2186
 Amount: 0.47281

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

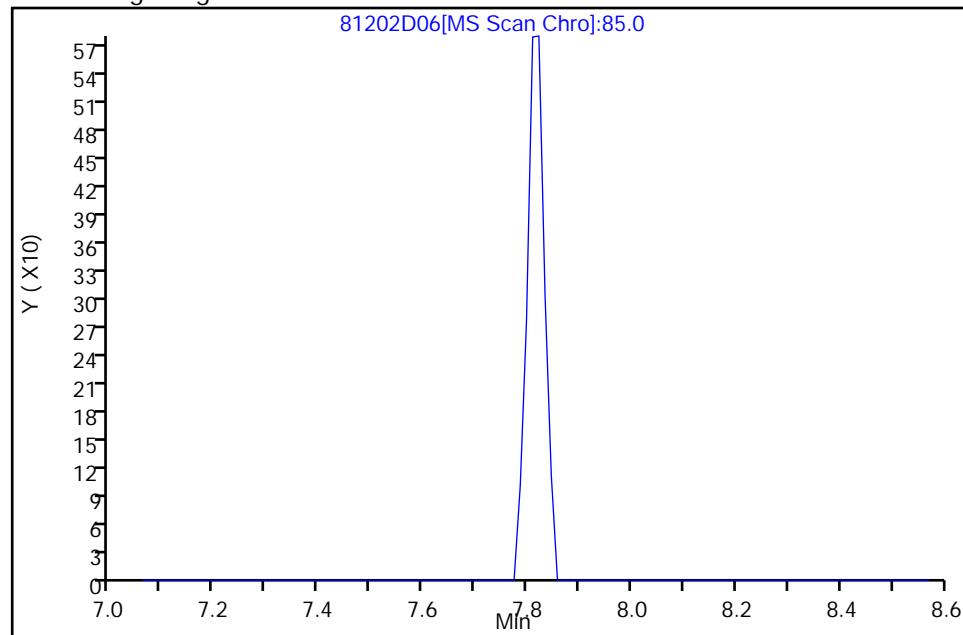
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

49 Bromodichloromethane, CAS: 75-27-4

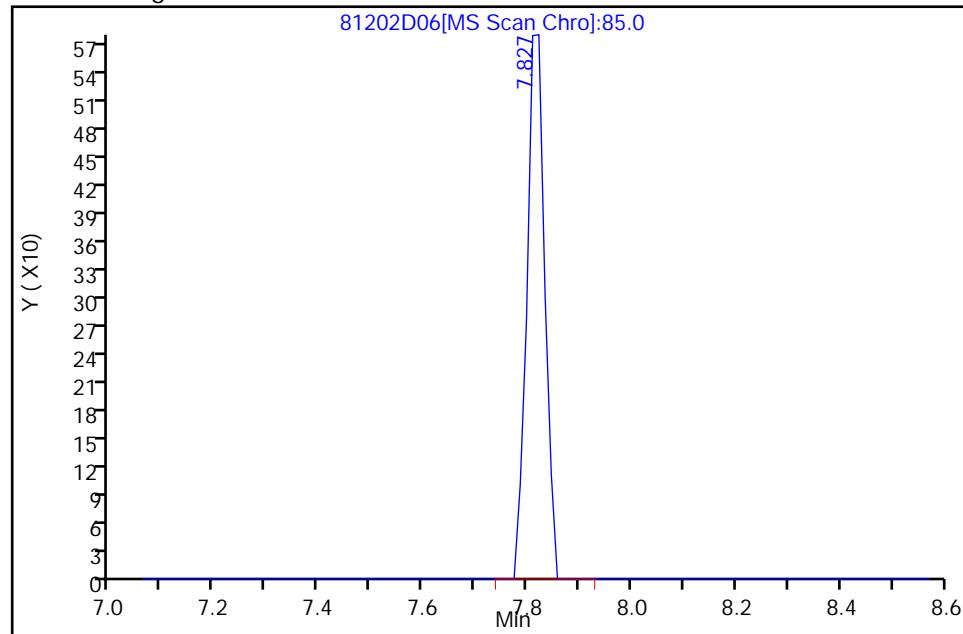
Not Detected
7.827

Processing Integration Results



RT: 7.827
 Response: 1382
 Amount: 0.47281

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:53:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Operator: PMM2

Column1: DB-624 (0.25 mm)

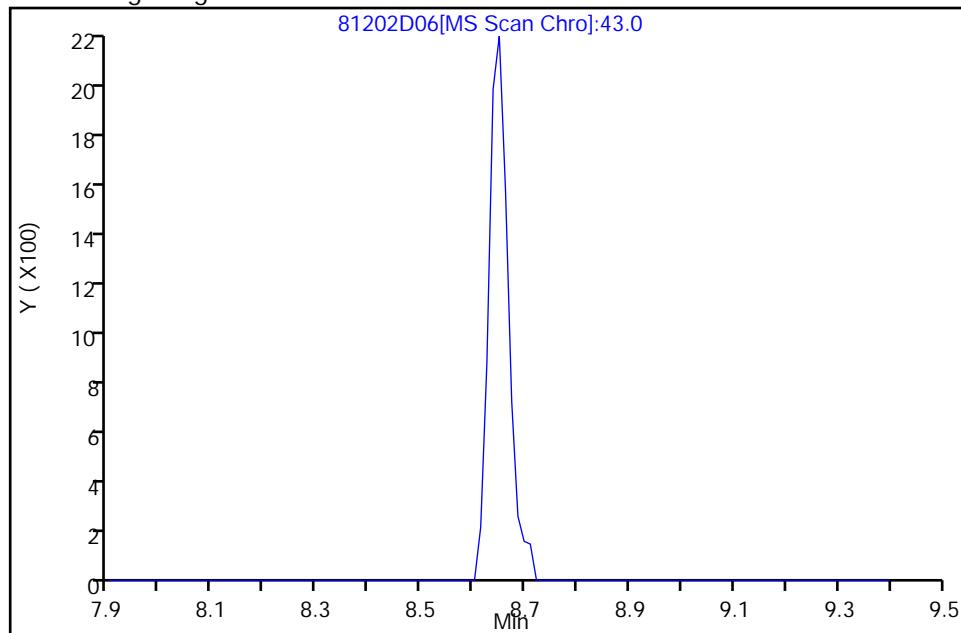
Detector: MS Scan

51 4-Methyl-2-pentanone, CAS: 108-10-1

Not Detected

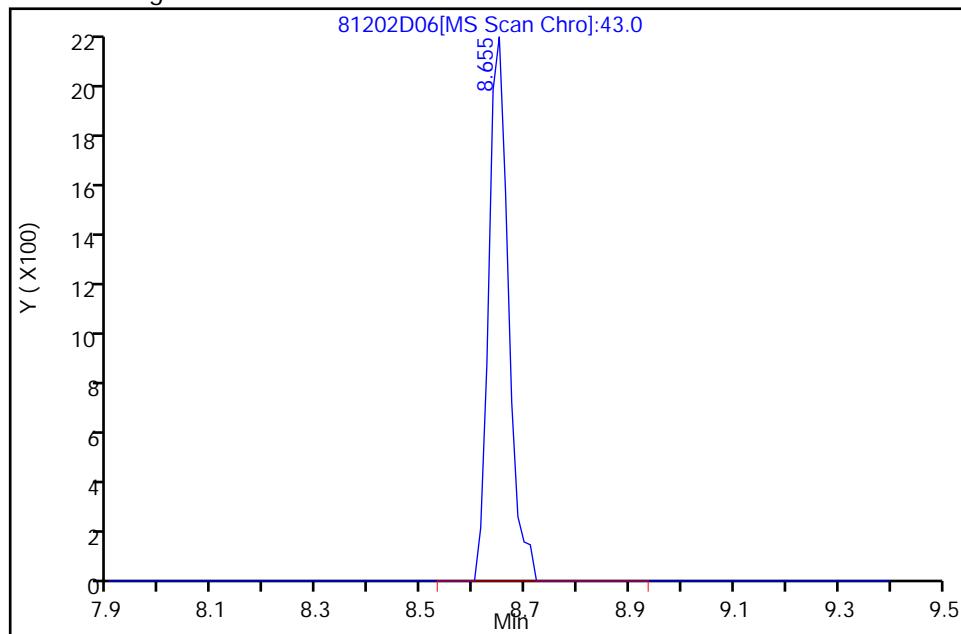
8.655

Processing Integration Results



RT: 8.655
 Response: 5569
 Amount: 4.6933

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector: MS Scan

Operator: PMM2

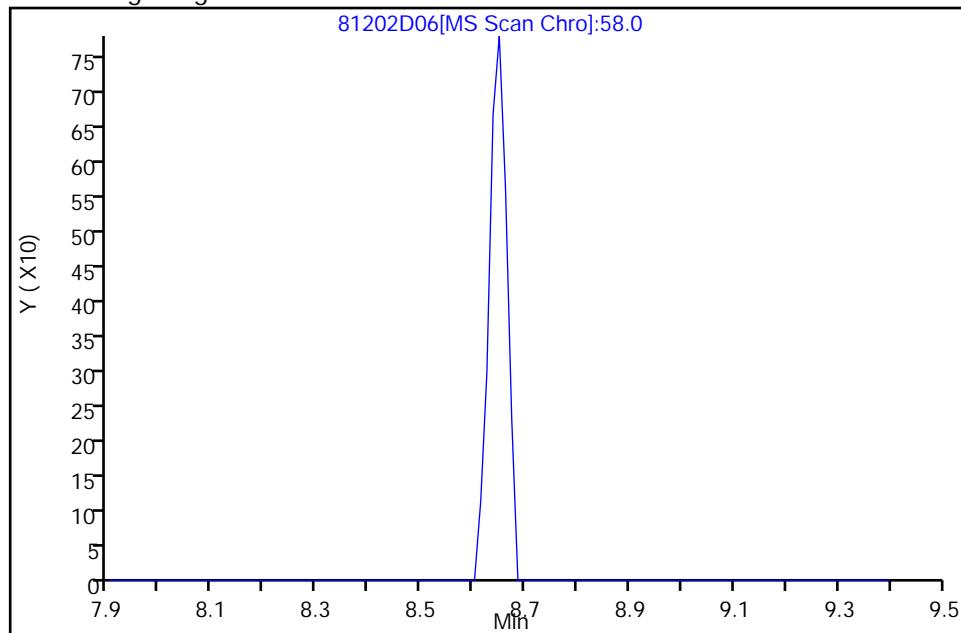
Column1: DB-624 (0.25 mm)

51 4-Methyl-2-pentanone, CAS: 108-10-1

Not Detected

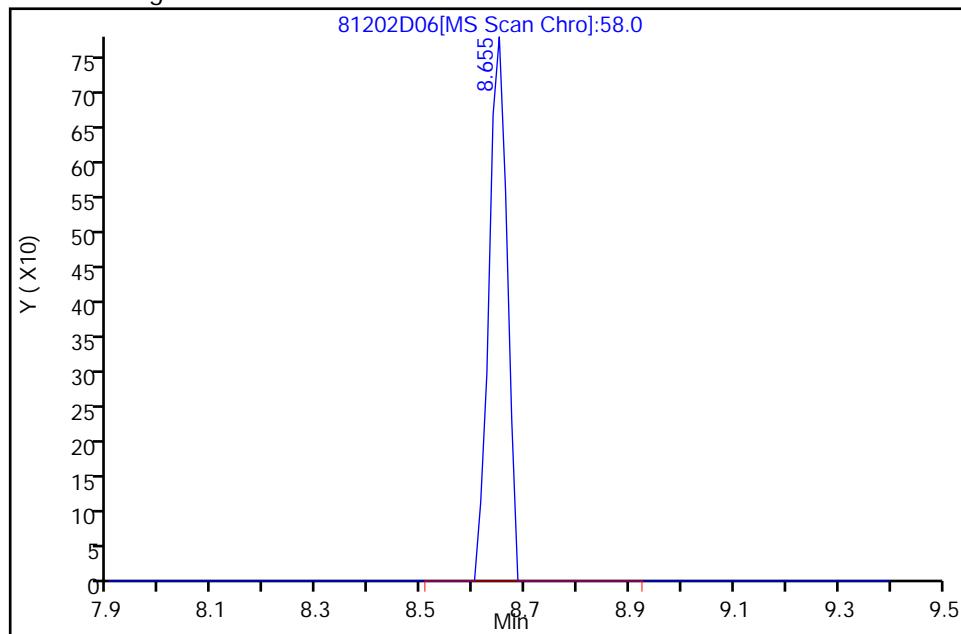
8.655

Processing Integration Results



RT: 8.655
 Response: 1868
 Amount: 4.6933

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Operator: PMM2

Column1: DB-624 (0.25 mm)

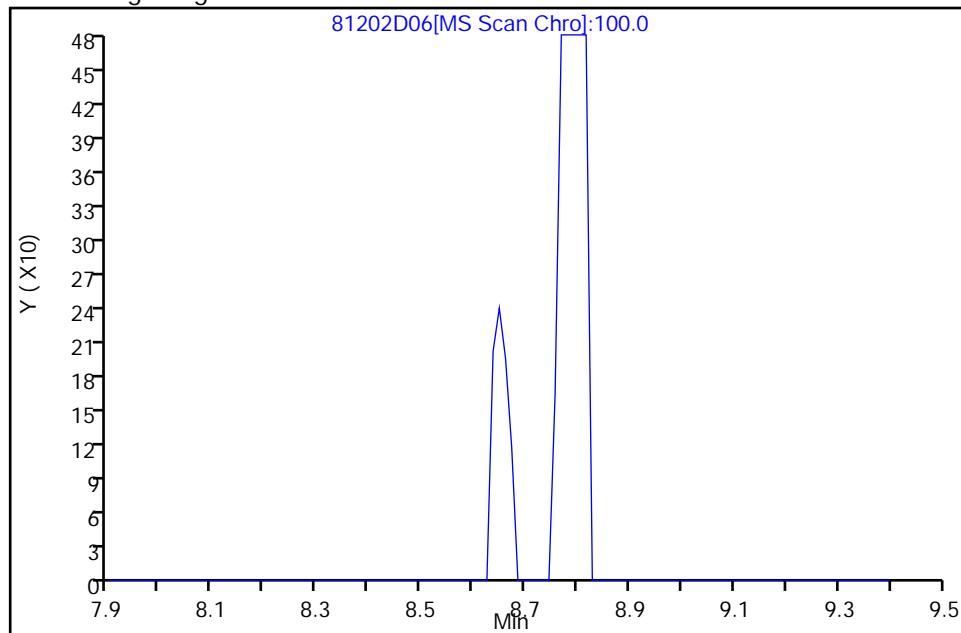
Detector: MS Scan

51 4-Methyl-2-pentanone, CAS: 108-10-1

Not Detected

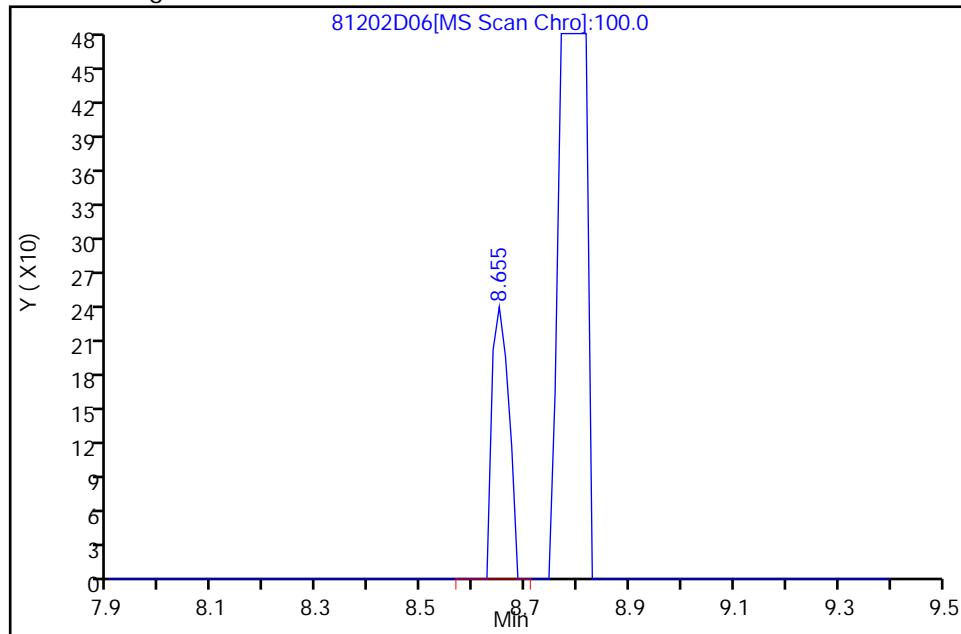
8.655

Processing Integration Results



RT: 8.655
 Response: 535
 Amount: 4.6933

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector:

Operator: PMM2

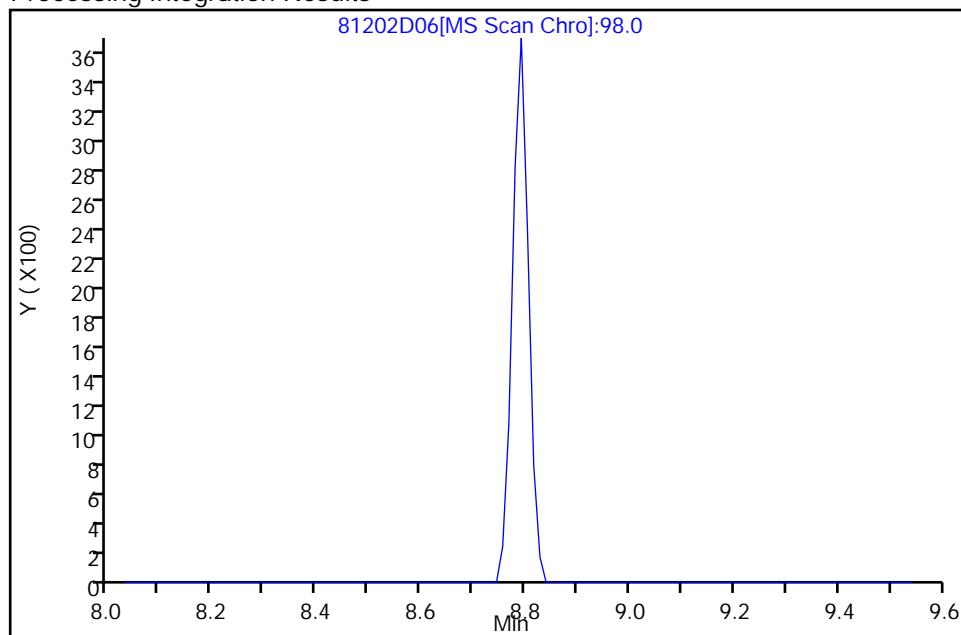
Column1: DB-624 (0.25 mm)

\$ 52 Toluene-d8, CAS: 2037-26-5

Not Detected

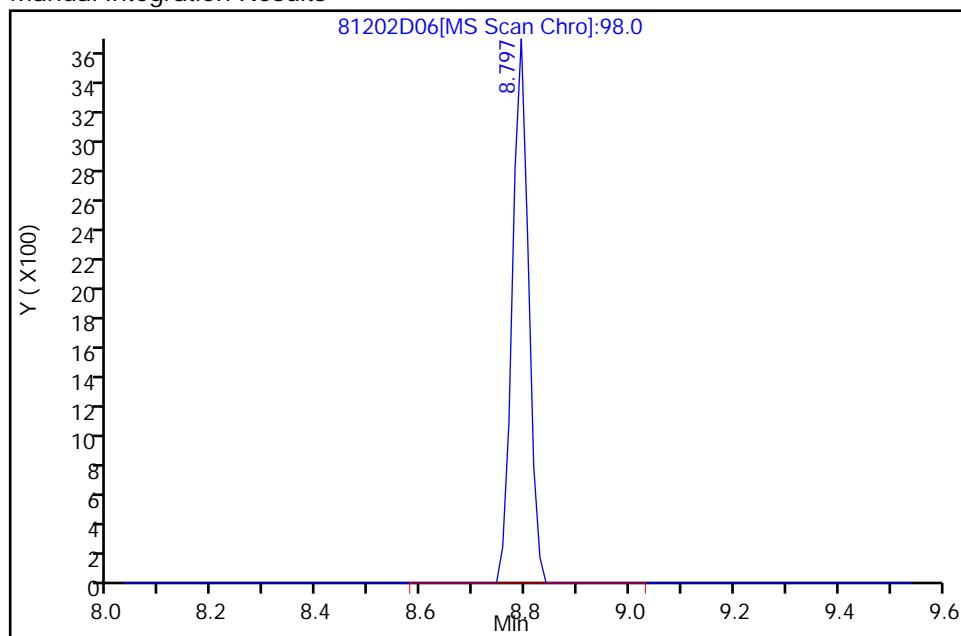
8.797

Processing Integration Results



RT: 8.797
 Response: 7879
 Amount: 0.49598

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Operator: PMM2

Detector: MS Scan

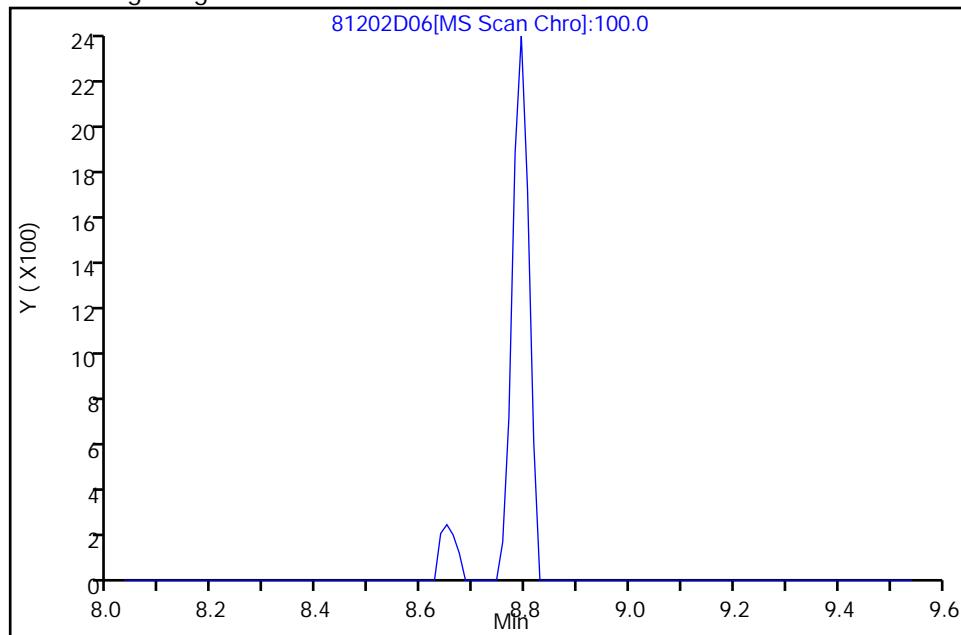
Column1: DB-624 (0.25 mm)

\$ 52 Toluene-d8, CAS: 2037-26-5

Not Detected

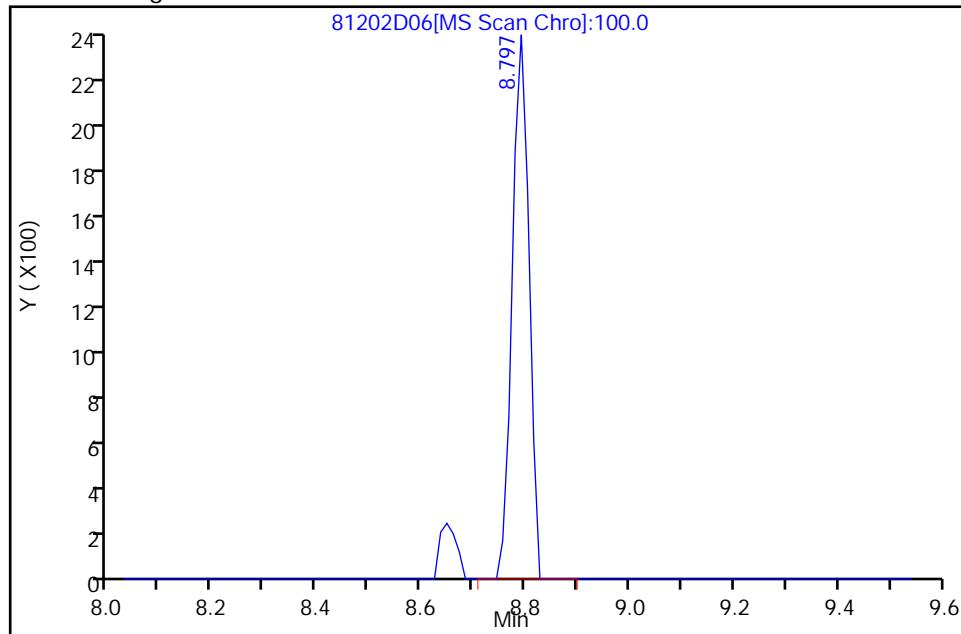
8.797

Processing Integration Results



RT: 8.797
 Response: 5213
 Amount: 0.49598

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector:

Operator: PMM2

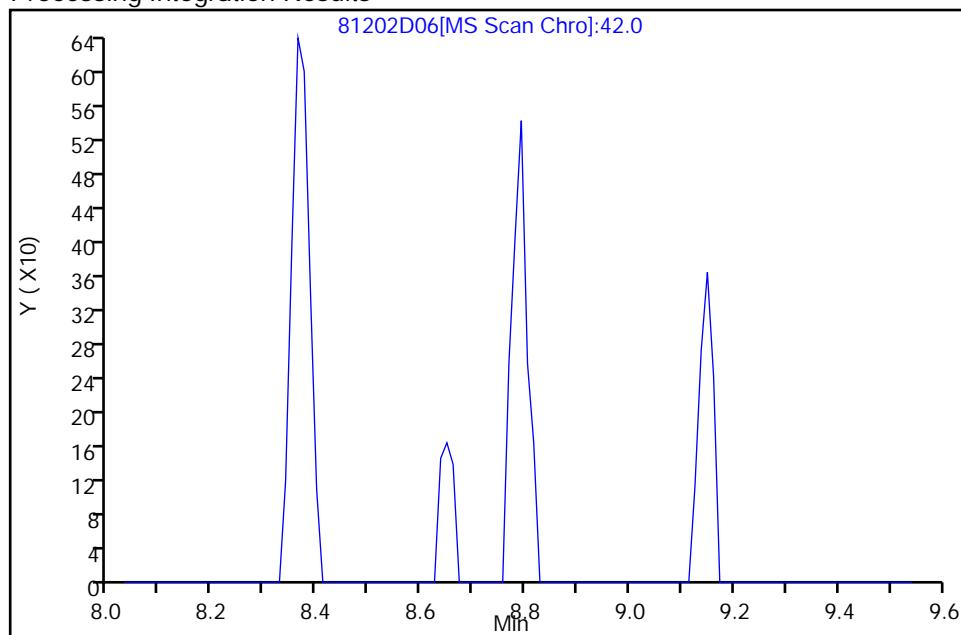
Column1: DB-624 (0.25 mm) MS Scan

\$ 52 Toluene-d8, CAS: 2037-26-5

Not Detected

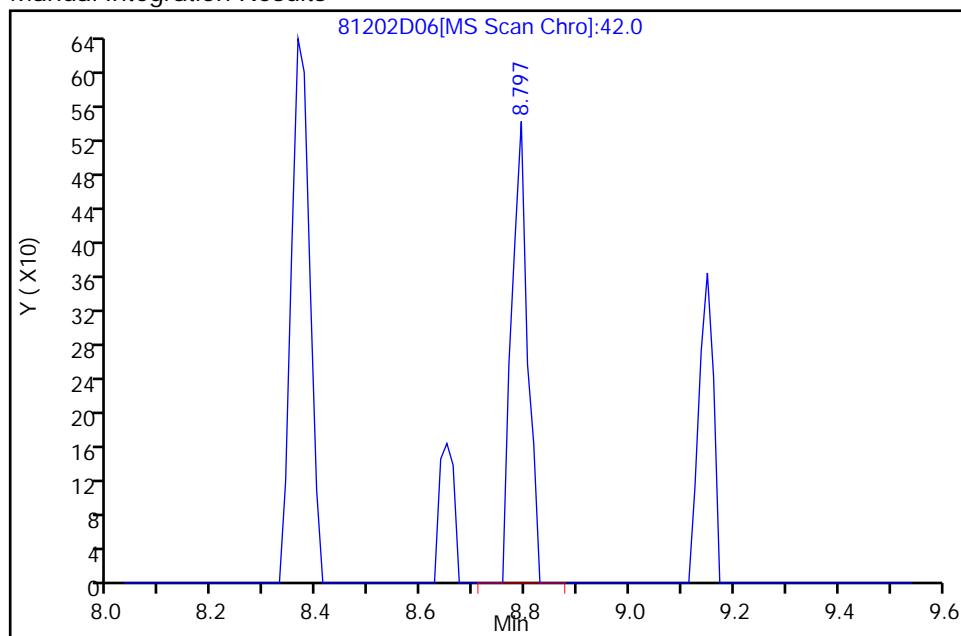
8.797

Processing Integration Results



RT: 8.797
 Response: 1140
 Amount: 0.49598

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

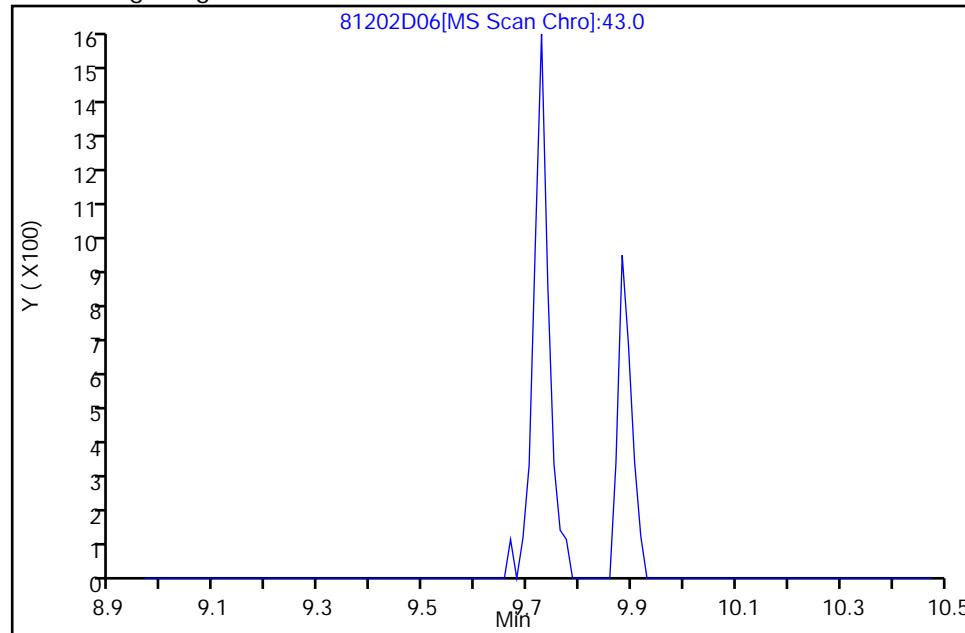
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

60 2-Hexanone, CAS: 591-78-6

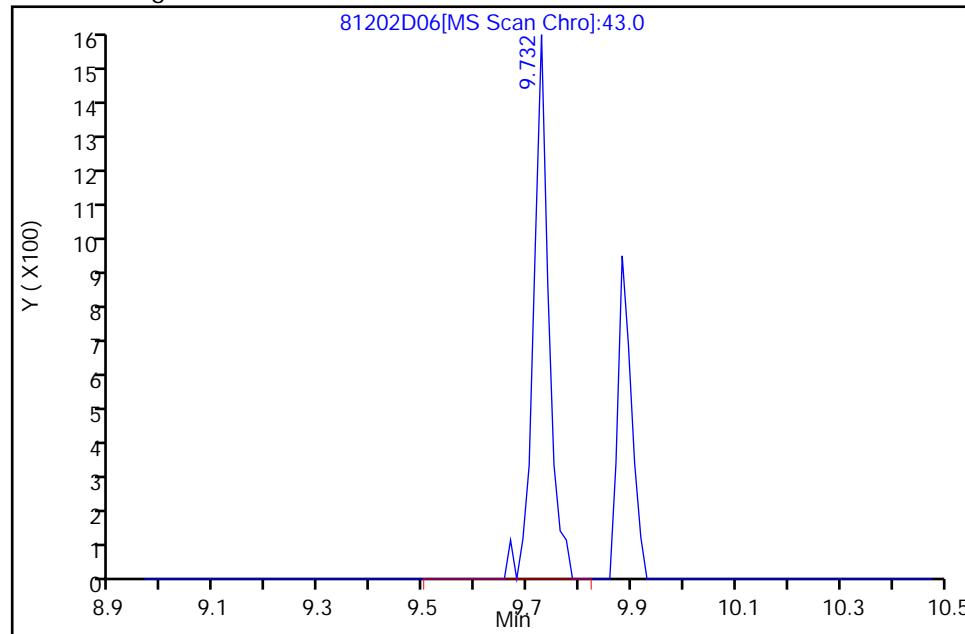
Not Detected
9.732

Processing Integration Results



RT: 9.732
 Response: 3121
 Amount: 4.6793

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

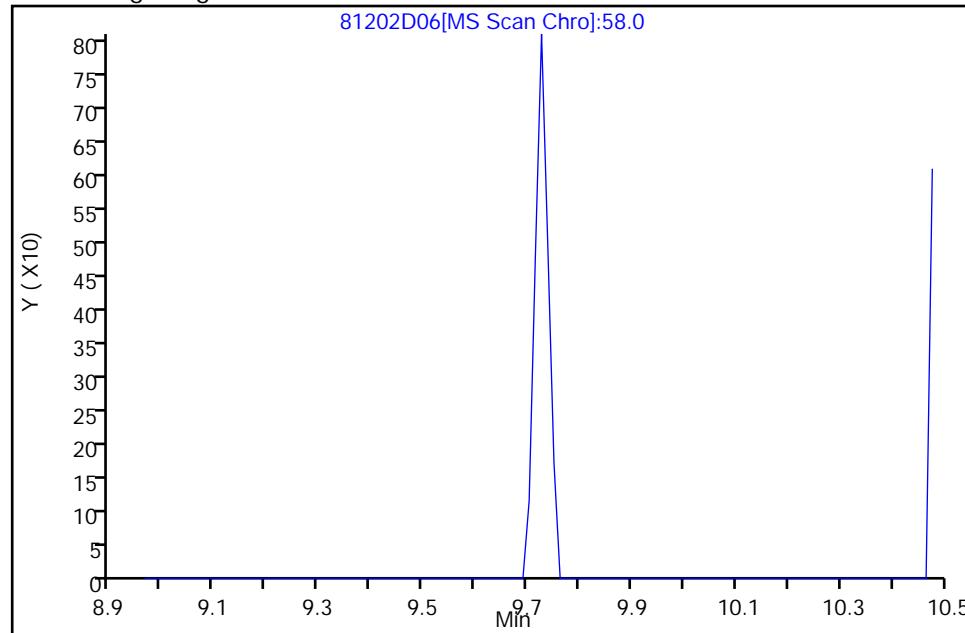
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

60 2-Hexanone, CAS: 591-78-6

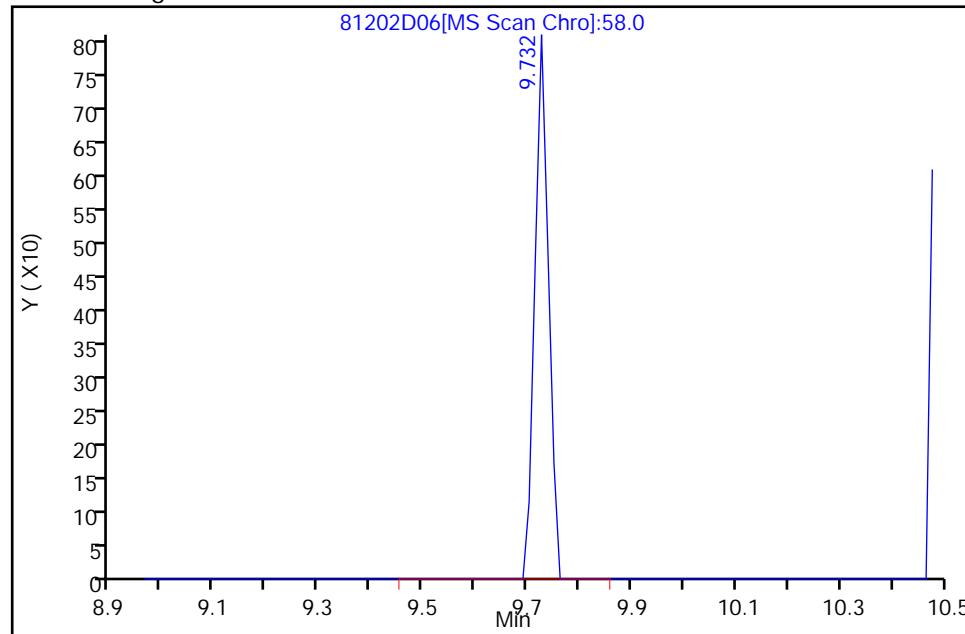
Not Detected
9.732

Processing Integration Results



RT: 9.732
 Response: 1468
 Amount: 4.6793

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

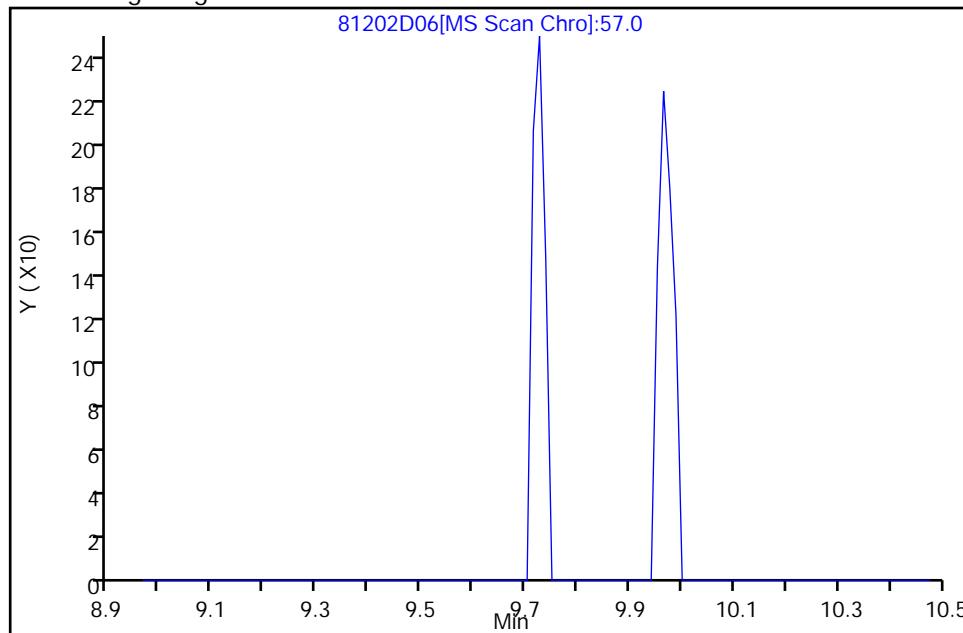
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

60 2-Hexanone, CAS: 591-78-6

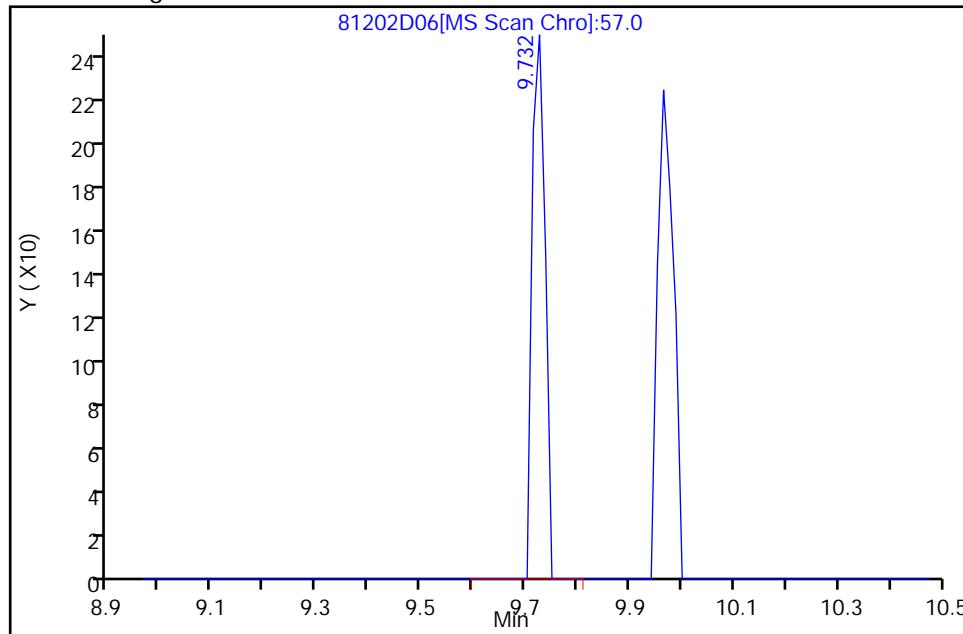
Not Detected
9.732

Processing Integration Results



RT: 9.732
 Response: 423
 Amount: 4.6793

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

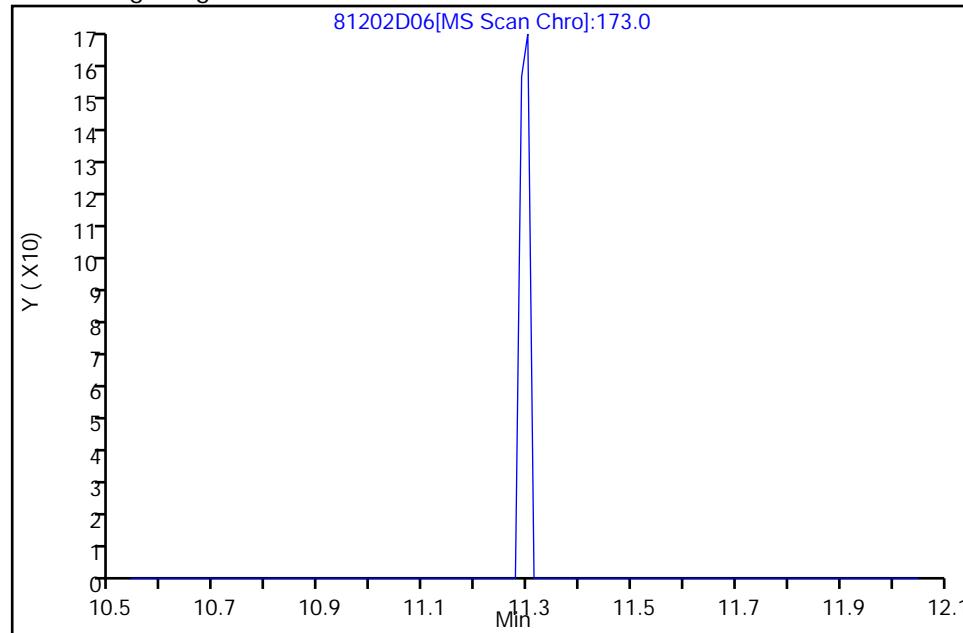
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

70 Bromoform, CAS: 75-25-2

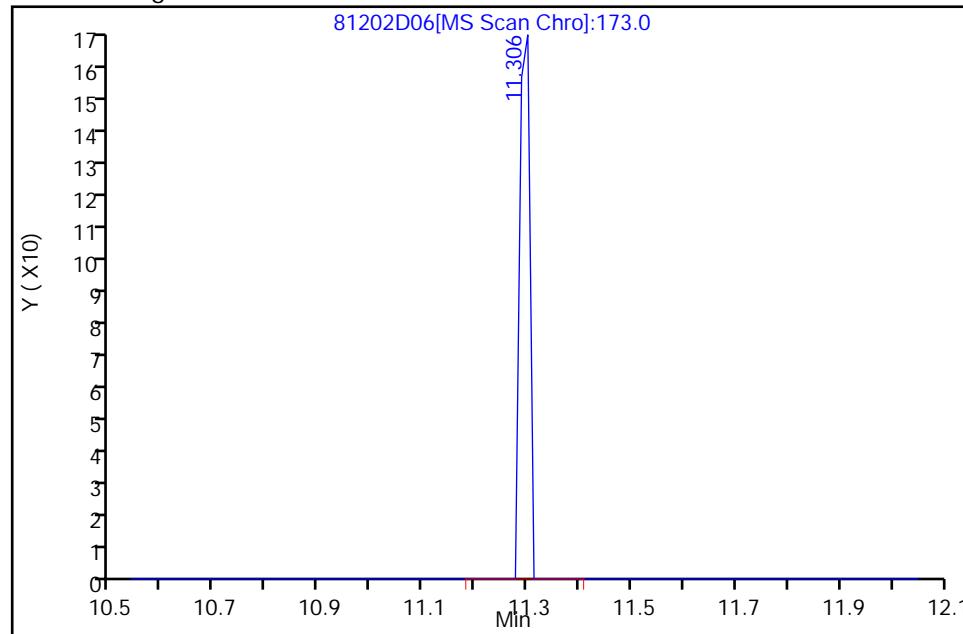
Not Detected
11.306

Processing Integration Results



RT: 11.306
 Response: 226
 Amount: 0.30681

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

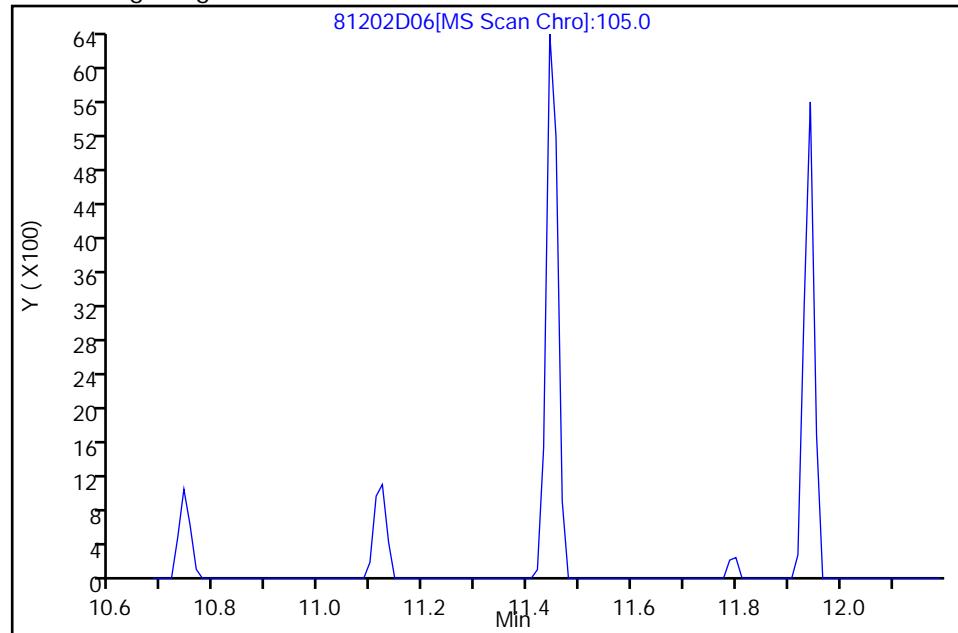
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

71 Isopropylbenzene, CAS: 98-82-8

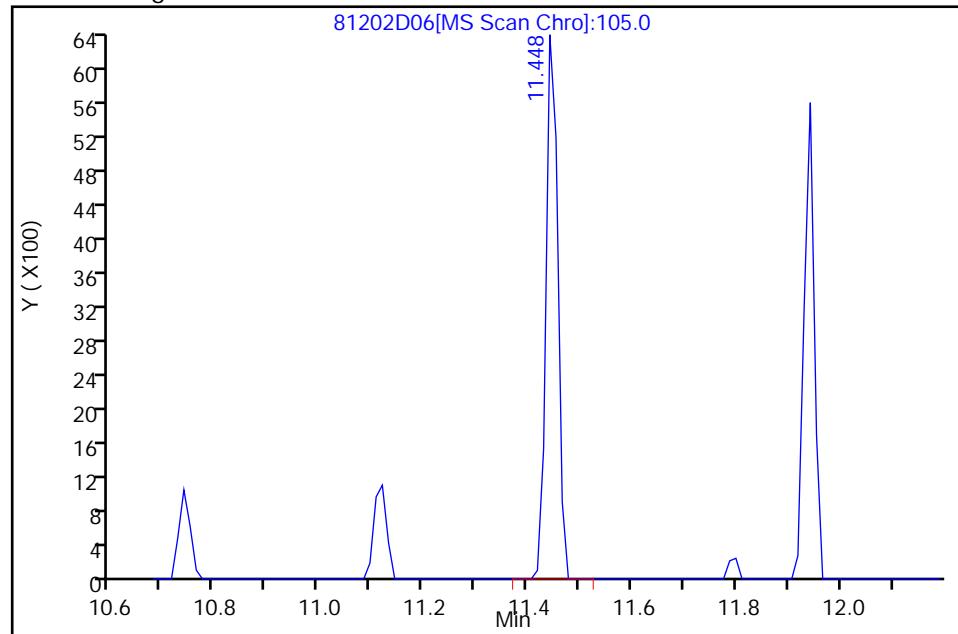
Not Detected
11.448

Processing Integration Results



RT: 11.448
 Response: 9884
 Amount: 0.46524

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

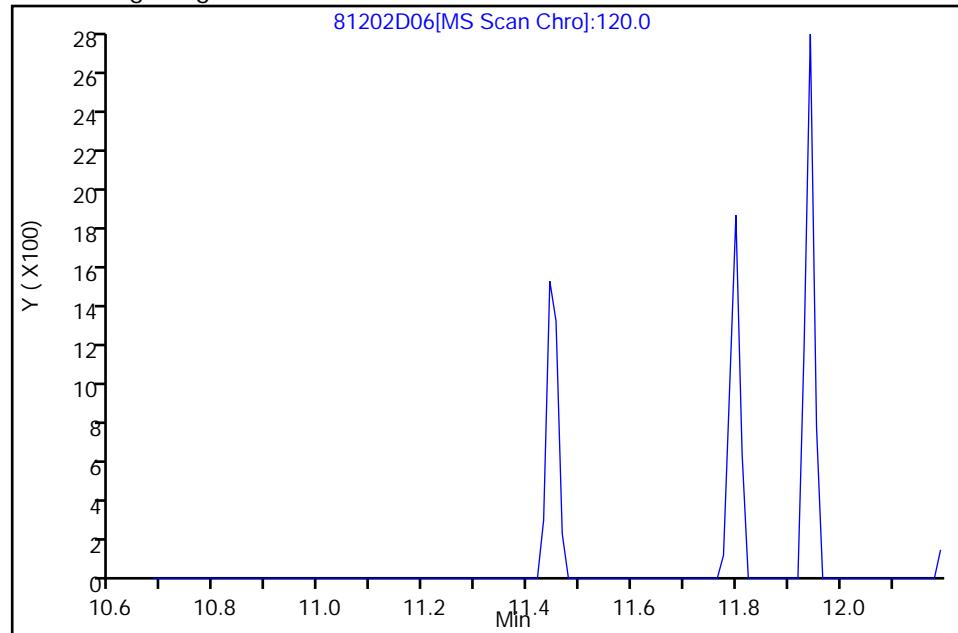
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

71 Isopropylbenzene, CAS: 98-82-8

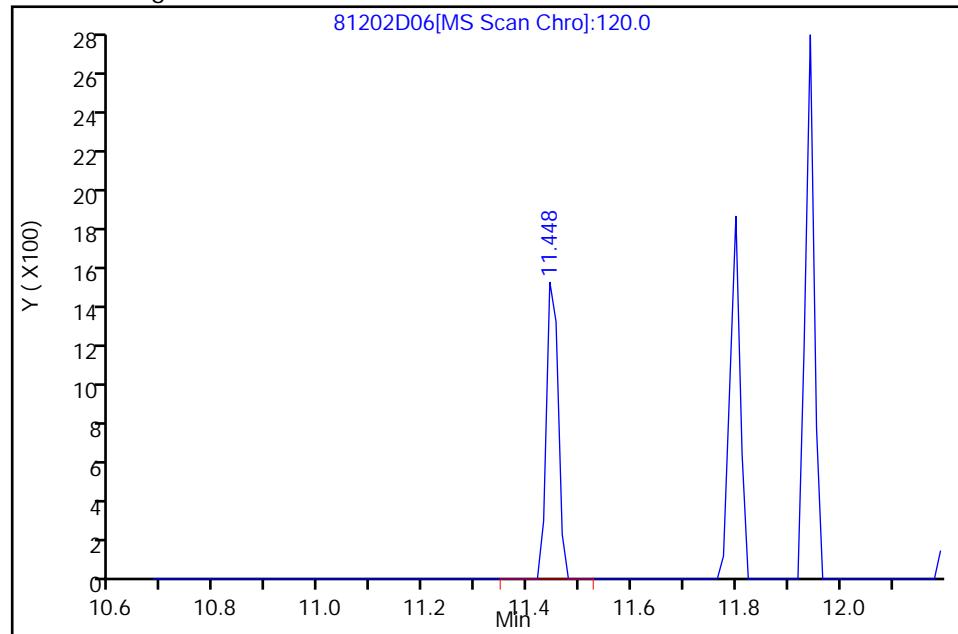
Not Detected
11.448

Processing Integration Results



RT: 11.448
 Response: 2396
 Amount: 0.46524

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

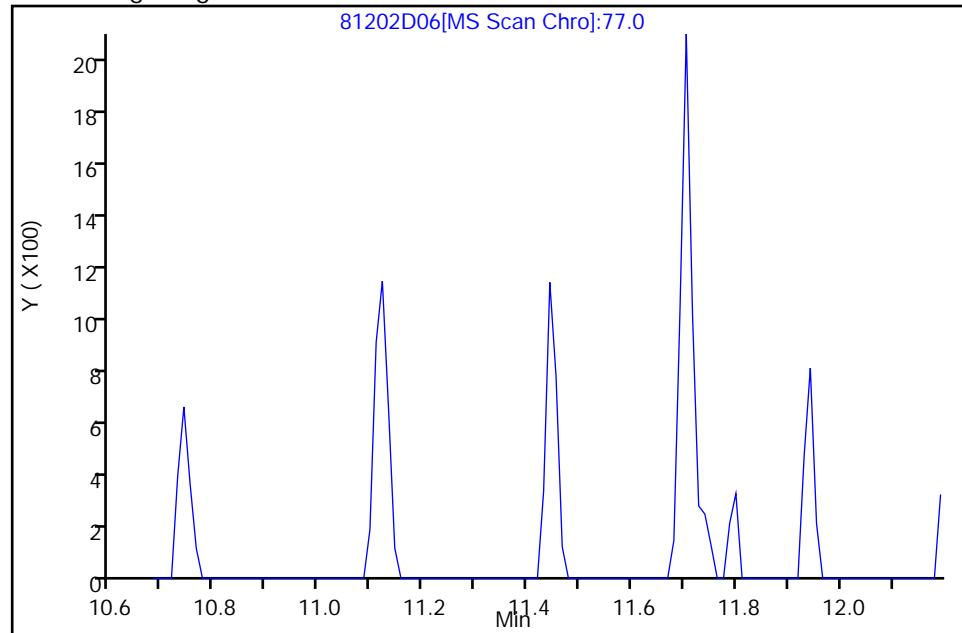
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

71 Isopropylbenzene, CAS: 98-82-8

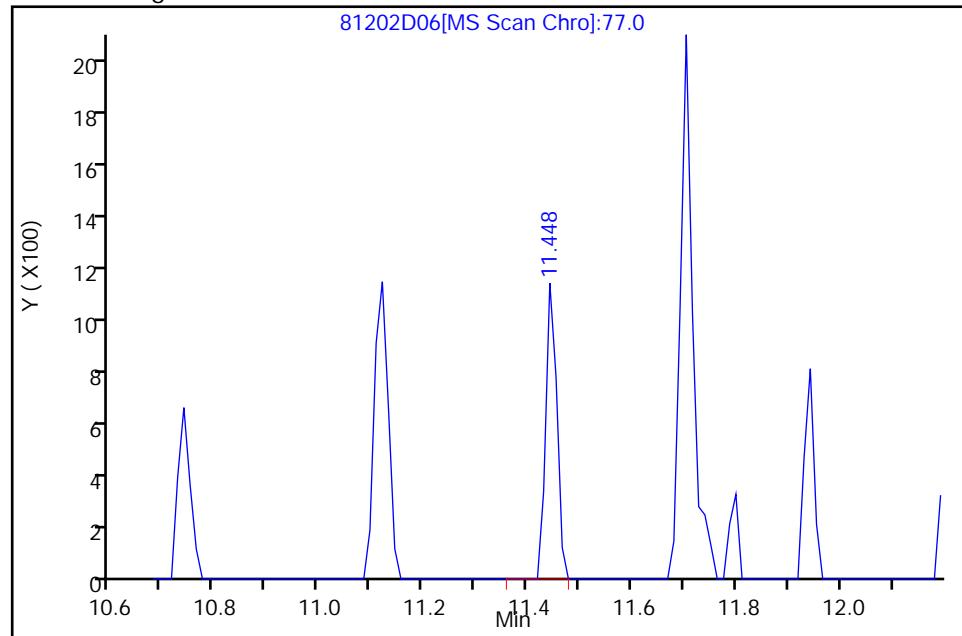
Not Detected
11.448

Processing Integration Results



RT: 11.448
 Response: 1666
 Amount: 0.46524

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Operator: PMM2

Column1: DB-624 (0.25 mm)

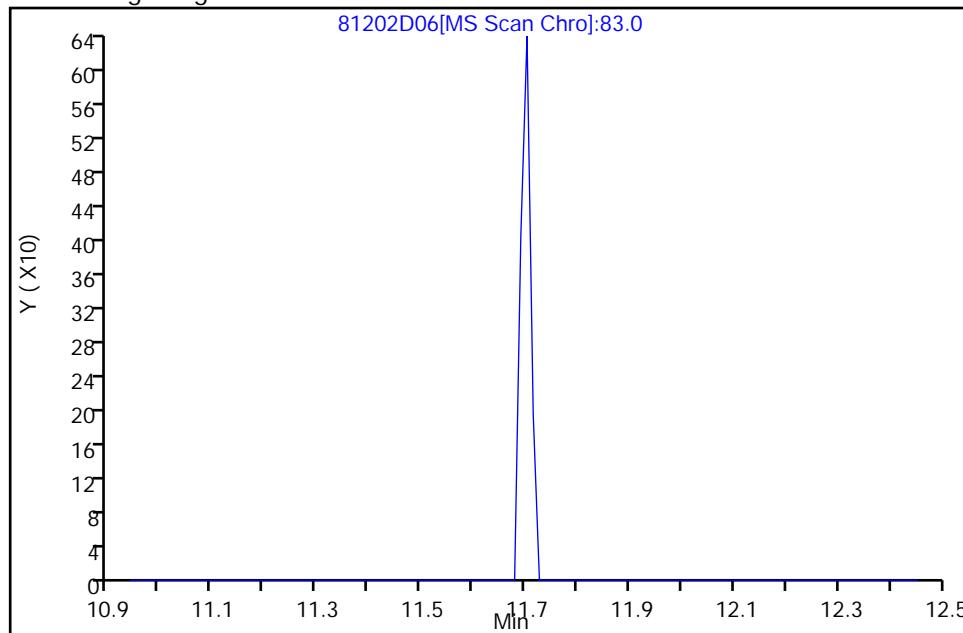
Detector: MS Scan

74 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Not Detected

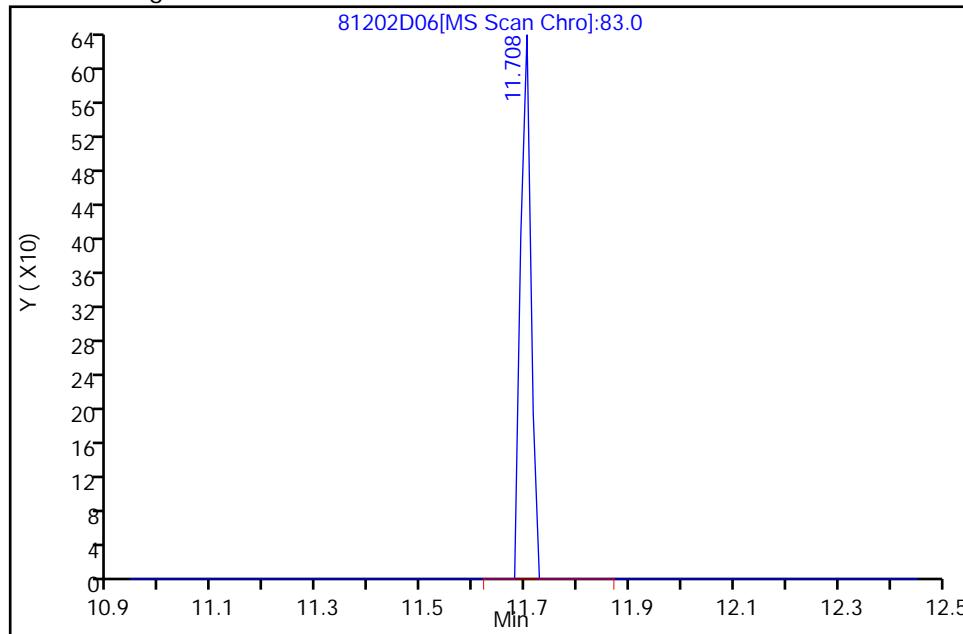
11.708

Processing Integration Results



RT: 11.708
 Response: 876
 Amount: 0.46327

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector: MS Scan

Operator: PMM2

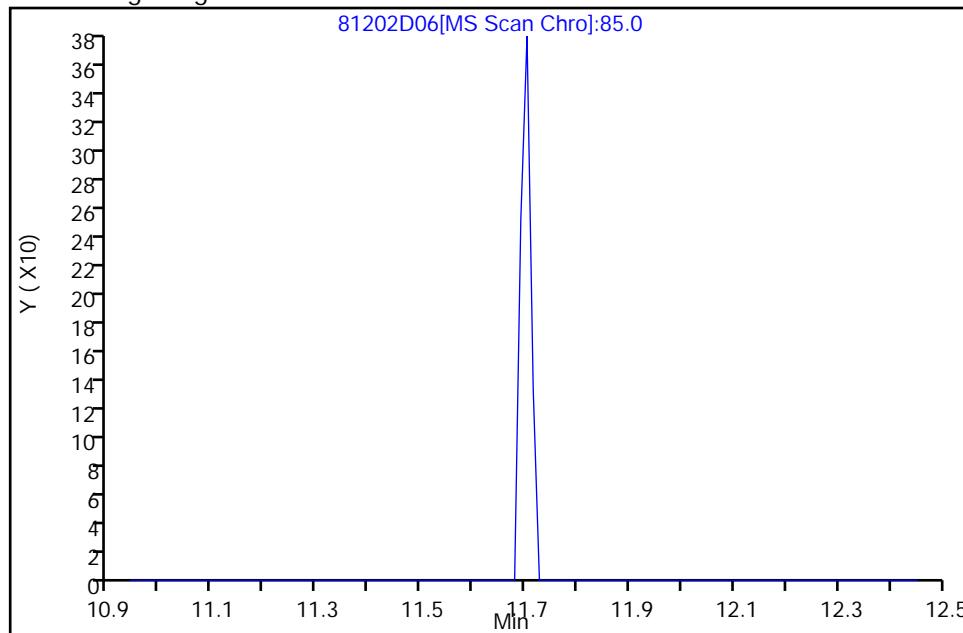
Column1: DB-624 (0.25 mm)

74 1,1,2,2-Tetrachloroethane, CAS: 79-34-5

Not Detected

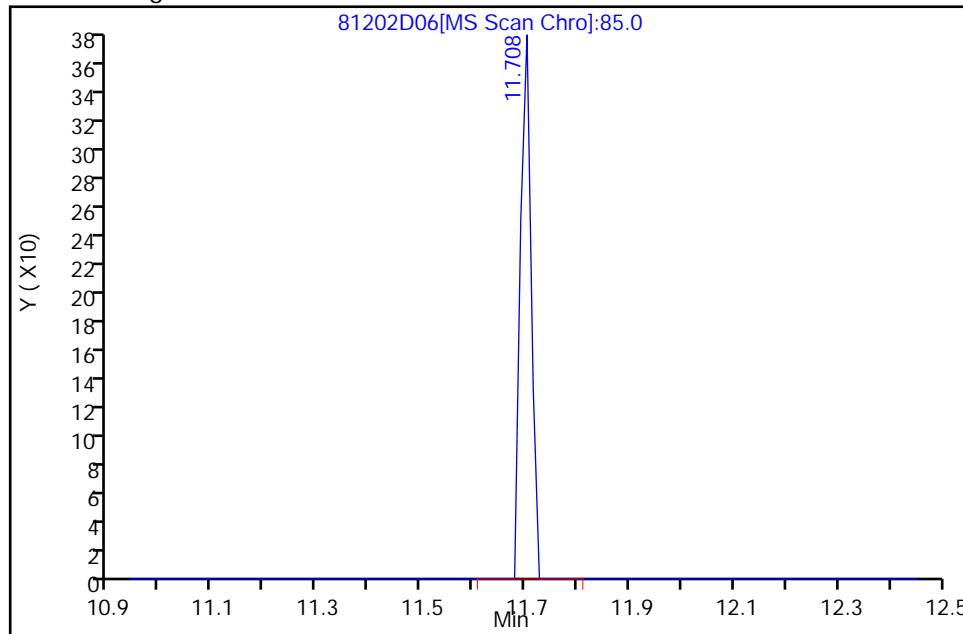
11.708

Processing Integration Results



RT: 11.708
 Response: 534
 Amount: 0.46327

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: NOID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Purge Vol. 25 ML

Dil. Factor: 1.0

Operator: PMM2

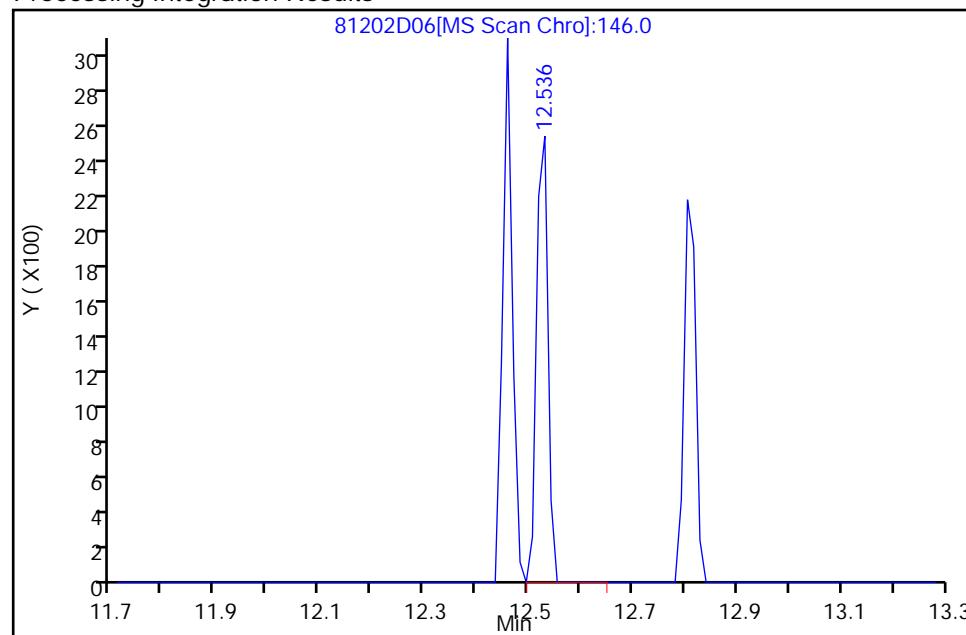
Column1: DB-624 (0.25 mm)

Detector: MS Scan

83 1,3-Dichlorobenzene, CAS: 541-73-1

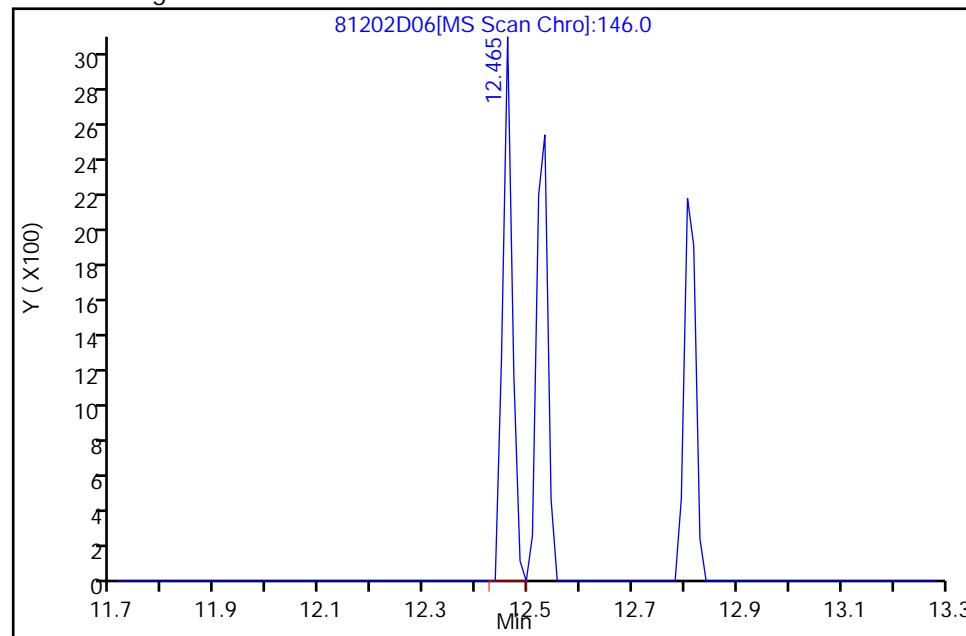
Processing Integration Results

RT: 12.536
 Response: 3764
 Amount: 0.47923



Manual Integration Results

RT: 12.465
 Response: 3888
 Amount: 0.49191



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

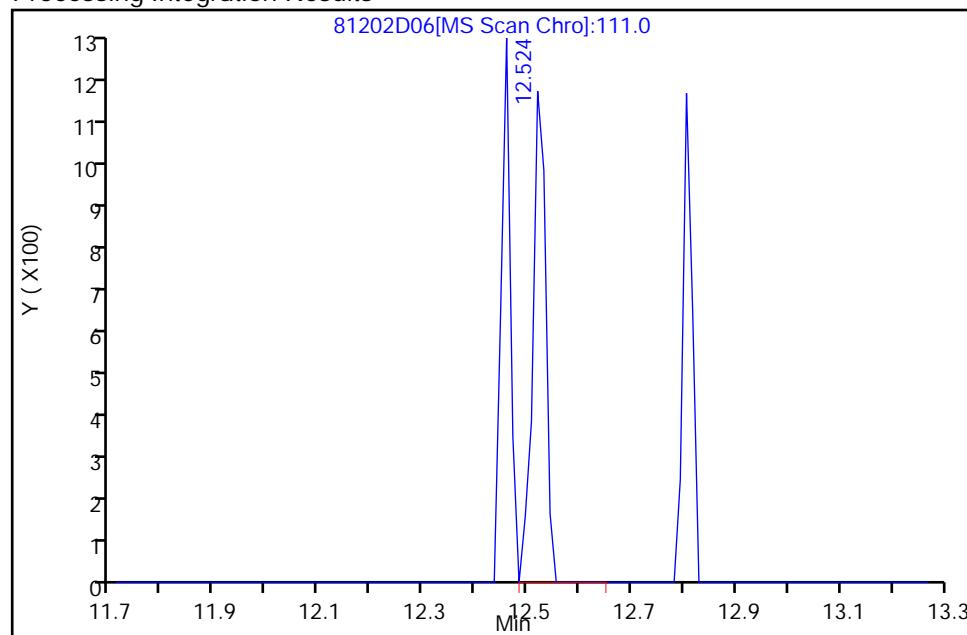
Manual Integration Report

Data File: \\Organics\DD\chem\msd8.\8120214D.b\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2
 Column1: DB-624 (0.25 mm) Detector: MS Scan

83 1,3-Dichlorobenzene, CAS: 541-73-1

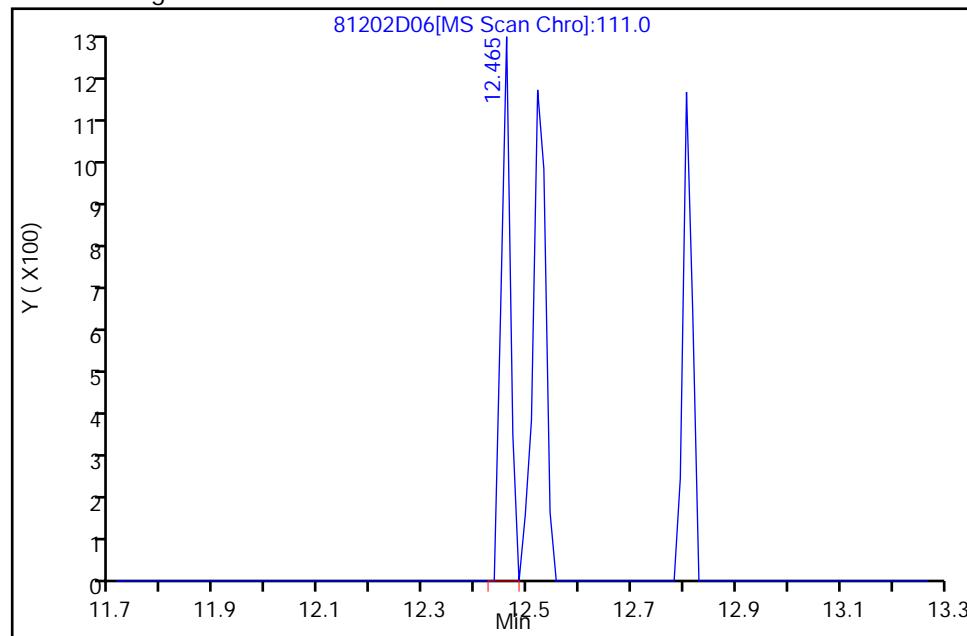
Processing Integration Results

RT: 12.524
 Response: 1968
 Amount: 0.47923



Manual Integration Results

RT: 12.465
 Response: 1564
 Amount: 0.49191



Data Editor: all, 03-Dec-2014 07:54:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector:

Operator: PMM2

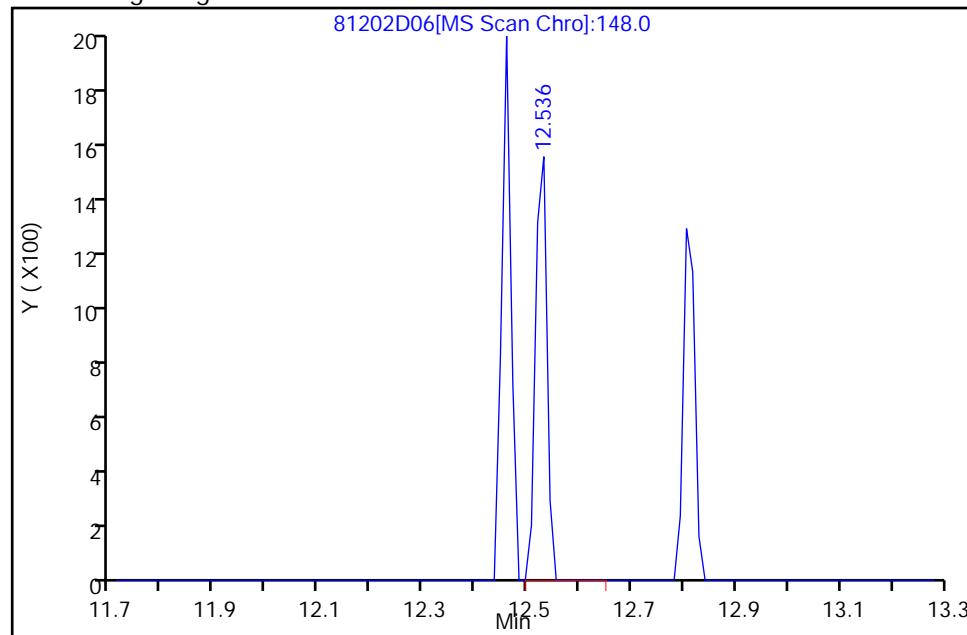
MS Scan

Column1: DB-624 (0.25 mm)

83 1,3-Dichlorobenzene, CAS: 541-73-1

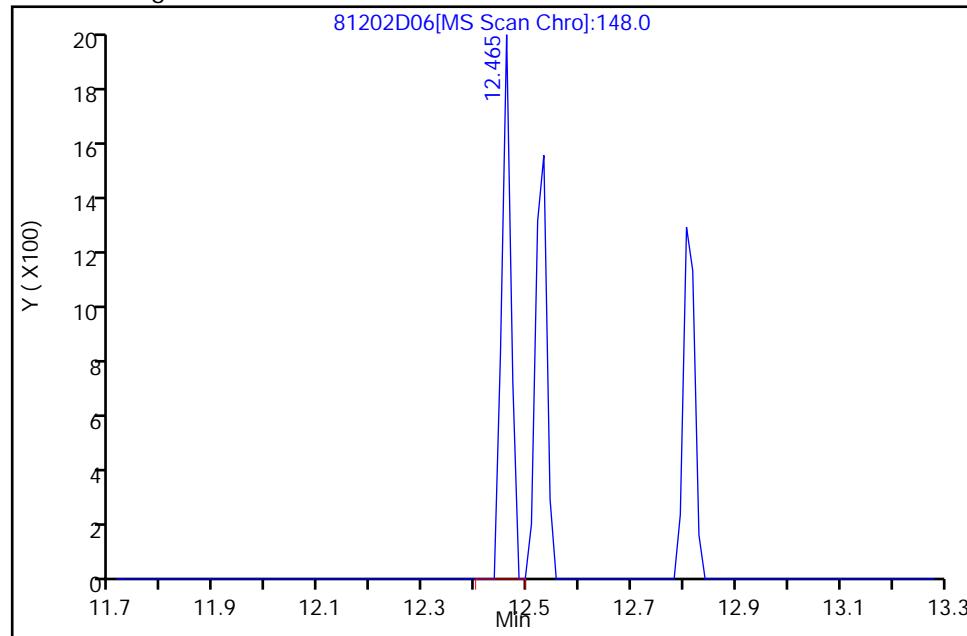
Processing Integration Results

RT: 12.536
 Response: 2379
 Amount: 0.47923



Manual Integration Results

RT: 12.465
 Response: 2503
 Amount: 0.49191



Data Editor: all, 03-Dec-2014 07:55:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

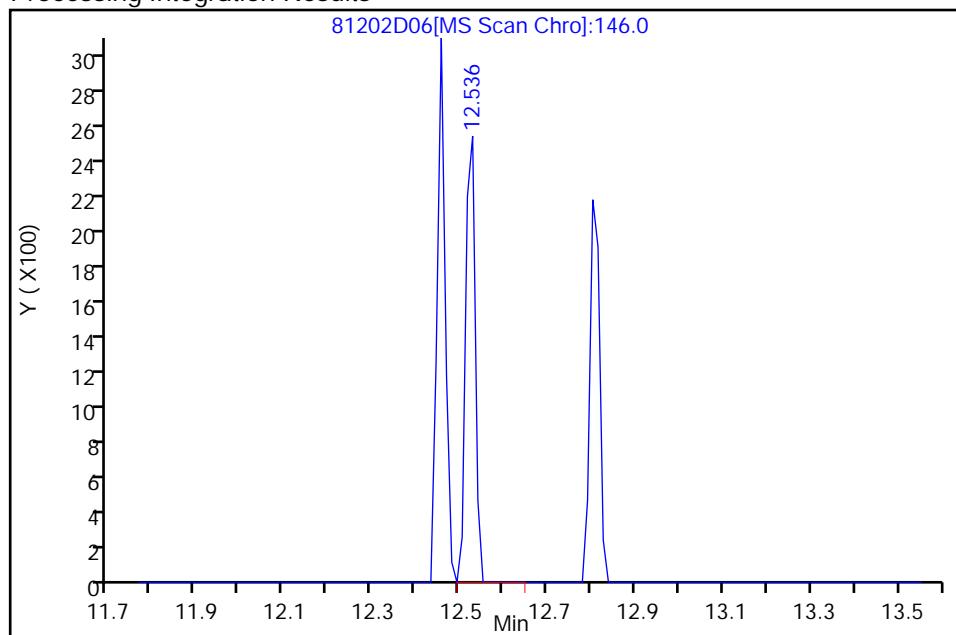
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

89 1,2-Dichlorobenzene, CAS: 95-50-1

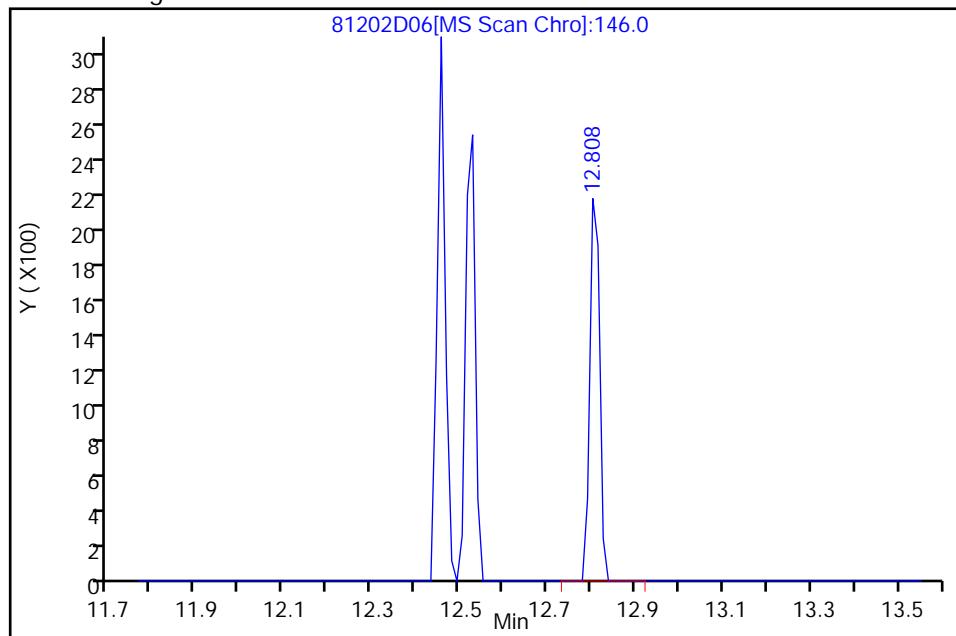
Processing Integration Results

RT: 12.536
 Response: 3765
 Amount: 0.54767



Manual Integration Results

RT: 12.808
 Response: 3306
 Amount: 0.49410



Data Editor: all, 03-Dec-2014 07:55:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

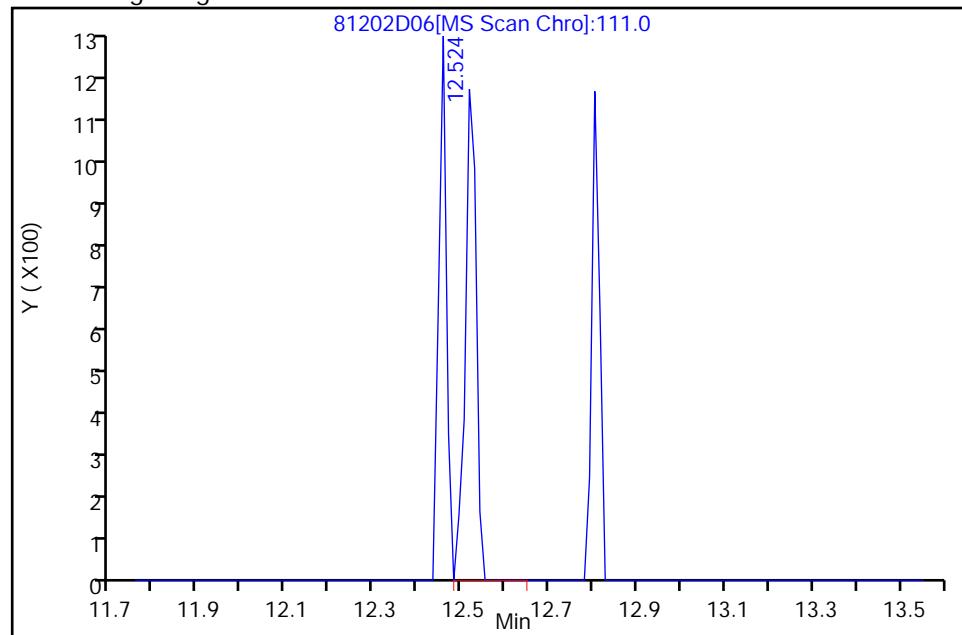
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

89 1,2-Dichlorobenzene, CAS: 95-50-1

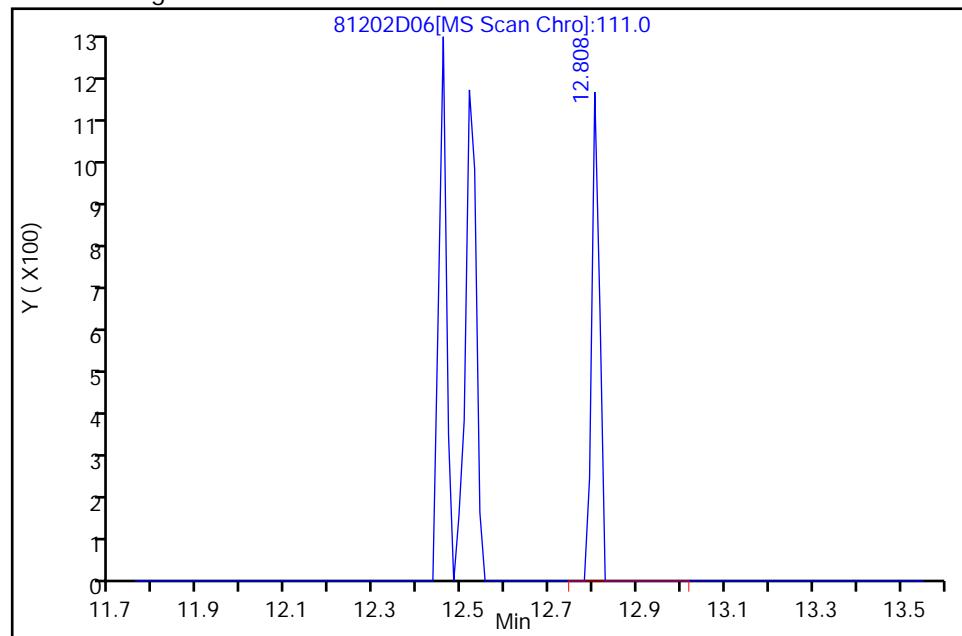
Processing Integration Results

RT: 12.524
 Response: 1968
 Amount: 0.54767



Manual Integration Results

RT: 12.808
 Response: 1414
 Amount: 0.49410



Data Editor: all, 03-Dec-2014 07:55:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

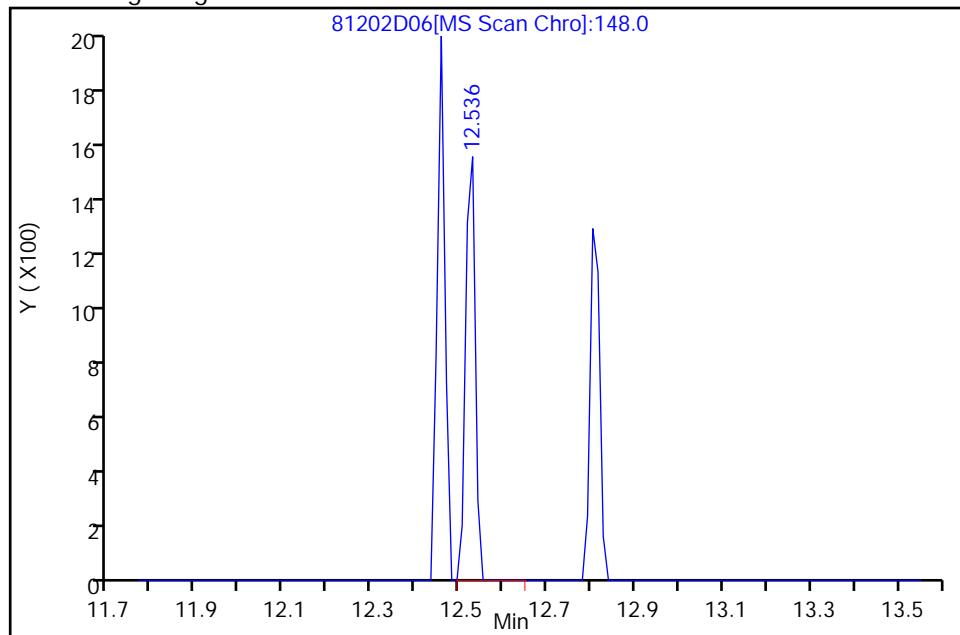
Manual Integration Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D06.D
 Injection Date: 03-Dec-2014 01:53:30 Inst. ID: msd8.i
 Client ID: VSTD0.5MV Lab ID: VSTD0.5MV
 Sample Info: 8120214D.b, VSTD0.5MV
 Purge Vol. 25 ML Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

89 1,2-Dichlorobenzene, CAS: 95-50-1

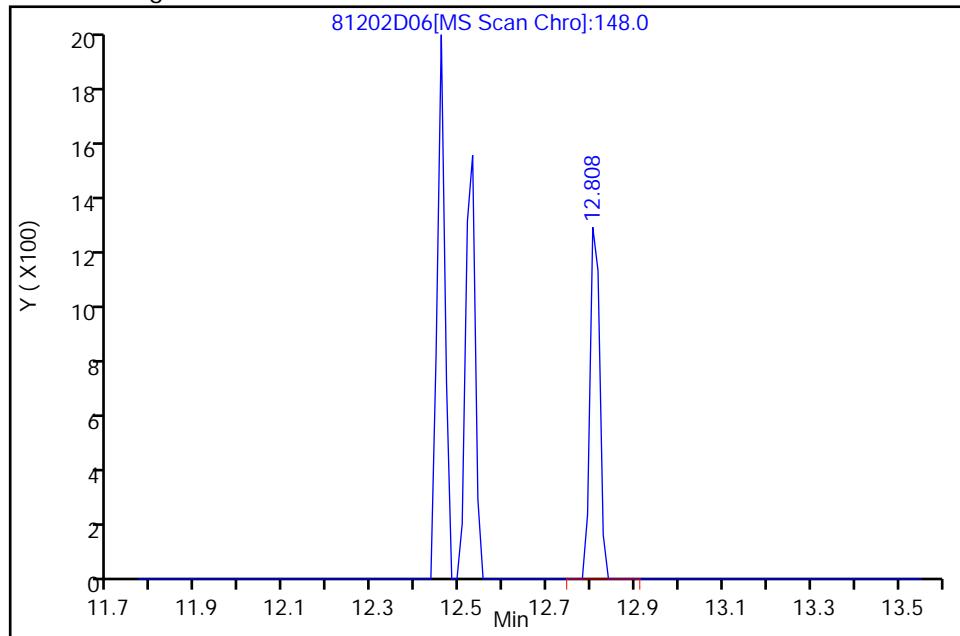
Processing Integration Results

RT: 12.536
 Response: 2379
 Amount: 0.54767



Manual Integration Results

RT: 12.808
 Response: 1994
 Amount: 0.49410



Data Editor: all, 03-Dec-2014 07:55:30

Audit Action: Mint

Audit Reason: MSID

Report Date: 03-Dec-2014 08:52:32

AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Manual Integration Report

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D06.D

Injection Date: 03-Dec-2014 01:53:30

Inst. ID: msd8.i

Client ID: VSTD0.5MV

Lab ID: VSTD0.5MV

Sample Info: 8120214D.b, VSTD0.5MV

Dil. Factor: 1.0

Purge Vol. 25 ML

Detector:

Operator: PMM2

Column1: DB-624 (0.25 mm)

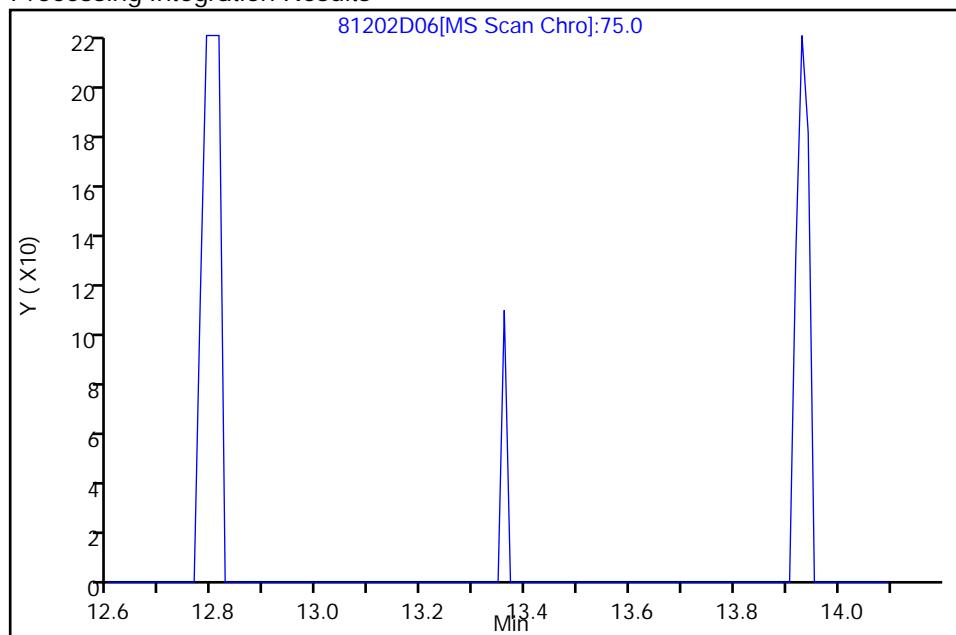
MS Scan

90 1,2-Dibromo-3-chloropropane, CAS: 96-12-8

Not Detected

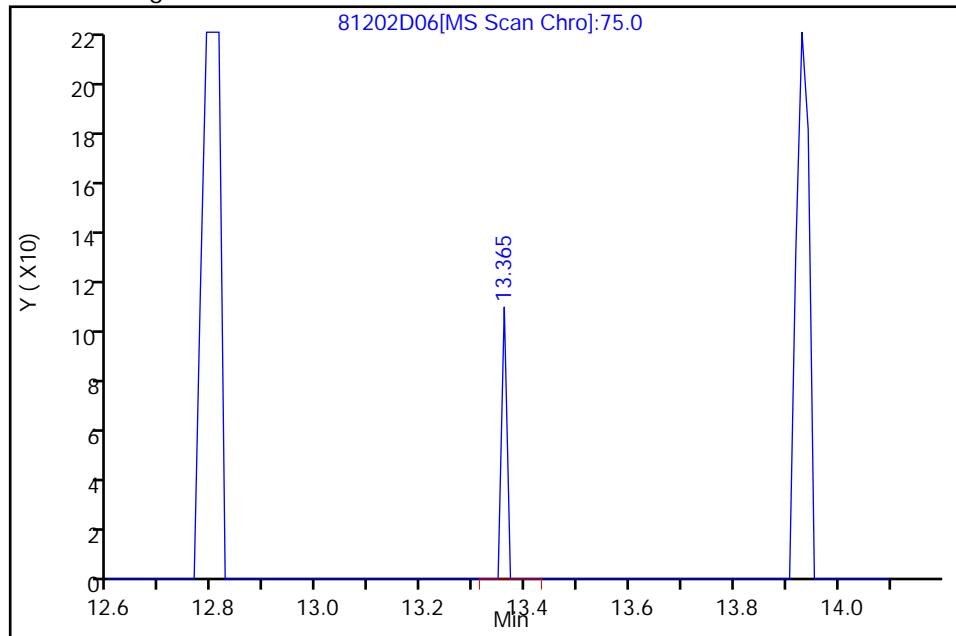
13.365

Processing Integration Results



RT: 13.365
 Response: 77
 Amount: 0.35663

Manual Integration Results



Data Editor: all, 03-Dec-2014 07:55:30

Audit Action: Mint

Audit Reason: NOID

b. Continuing Calibration Data (Form VII VOA-1, VOA-2, VOA-3)

Arrange in chronological order, by instrument.

- (1) Quantitation reports for all continuing (12-hour) calibrations.
Spectra not required.
- (2) Reconstructed Ion Chromatograms.
- (3) EICPs displaying each manual integration.

7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Instrument ID: MSD8

Calibration Date: 12/04/2014 Time: 1028

Lab File ID: 81204A04

Init. Calib. Date(s): 12/03/2014 12/03/2014

EPA Sample No. (VSTD#####): VSTD005NI

Init. Calib. Time(s): 0000 0153

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF 5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.3899	0.2895	0.0100	-25.8	40.0
Chloromethane	0.4922	0.3996	0.0100	-18.8	40.0
Vinyl chloride	0.4415	0.3410	0.1000	-22.8	30.0
Bromomethane	0.2189	0.1802	0.1000	-17.7	30.0
Chloroethane	0.1863	0.1519	0.0100	-18.5	40.0
Trichlorodifluoromethane	0.3896	0.2811	0.0100	-27.9	40.0
1,1-Dichloroethene	0.2826	0.2341	0.1000	-17.2	30.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2342	0.1901	0.0100	-18.8	40.0
Acetone	0.0235	0.0209	0.0100	-11.3	40.0
Carbon disulfide	0.9045	0.7786	0.0100	-13.9	40.0
Methyl acetate	0.1136	0.1039	0.0100	-8.6	40.0
Methylene chloride	0.3004	0.2510	0.0100	-16.5	40.0
trans-1,2-Dichloroethene	0.3289	0.2809	0.0100	-14.6	40.0
Methyl tert-Butyl Ether	0.3851	0.3388	0.0100	-12.0	40.0
1,1-Dichloroethane	0.6512	0.5606	0.2000	-13.9	30.0
cis-1,2-Dichloroethene	0.3309	0.2896	0.0100	-12.5	40.0
2-Butanone	0.0359	0.0312	0.0100	-13.0	40.0
Bromochloromethane	0.0966	0.0903	0.0500	-6.5	30.0
Chloroform	0.5629	0.4804	0.2000	-14.7	30.0
1,1,1-Trichloroethane	0.5874	0.4796	0.1000	-18.3	30.0
Cyclohexane	0.9077	0.6724	0.0100	-25.9	40.0
Carbon tetrachloride	0.4745	0.4120	0.1000	-13.2	30.0
Benzene	1.8198	1.5320	0.4000	-15.8	30.0
1,2-Dichloroethane	0.2539	0.2284	0.1000	-10.0	30.0
Trichloroethene	0.4727	0.3826	0.3000	-19.1	30.0
Methylcyclohexane	0.8006	0.6389	0.0100	-20.2	40.0

7B - FORM VII VOA-2
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Instrument ID: MSD8

Calibration Date: 12/04/2014 Time: 1028

Lab File ID: 81204A04

Init. Calib. Date(s): 12/03/2014 12/03/2014

EPA Sample No. (VSTD#####): VSTD005NI

Init. Calib. Time(s): 0000 0153

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF 5.0	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.3930	0.3538	0.0100	-10.0	40.0
Bromodichloromethane	0.3779	0.3414	0.2000	-9.7	30.0
cis-1,3-Dichloropropene	0.4124	0.4083	0.2000	-1.0	30.0
4-Methyl-2-pentanone	0.0970	0.0860	0.0100	-11.4	40.0
Toluene	1.5955	1.4282	0.4000	-10.5	30.0
trans-1,3-Dichloropropene	0.2505	0.2593	0.1000	3.5	30.0
1,1,2-Trichloroethane	0.1446	0.1377	0.1000	-4.8	30.0
Tetrachloroethene	0.3086	0.2667	0.1000	-13.6	30.0
2-Hexanone	0.0545	0.0515	0.0100	-5.5	40.0
Dibromochloromethane	0.1467	0.1495	0.1000	1.9	30.0
1,2-Dibromoethane	0.1330	0.1321	0.0100	-0.7	40.0
Chlorobenzene	0.8722	0.7857	0.5000	-9.9	30.0
Ethylbenzene	1.7165	1.5098	0.1000	-12.0	30.0
o-Xylene	0.6462	0.5658	0.3000	-12.4	30.0
m,p-Xylene	0.6649	0.5862	0.3000	-11.8	30.0
Styrene	0.8411	0.7801	0.3000	-7.2	30.0
Bromoform	0.1280	0.1464	0.0500	14.4	30.0
Isopropylbenzene	1.7367	1.5078	0.0100	-13.2	40.0
1,1,2,2-Tetrachloroethane	0.1546	0.1505	0.1000	-2.7	30.0
1,3-Dichlorobenzene	1.3730	1.2770	0.4000	-7.0	30.0
1,4-Dichlorobenzene	1.3083	1.2414	0.4000	-5.1	30.0
1,2-Dichlorobenzene	1.1623	1.0630	0.4000	-8.5	30.0
1,2-Dibromo-3-chloropropane	0.0375	0.0388	0.0100	3.5	40.0
1,2,4-Trichlorobenzene	0.8548	0.7713	0.2000	-9.8	30.0
1,2,3-Trichlorobenzene	0.6760	0.7713	0.2000	14.1	30.0

7C - FORM VII VOA-3
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Instrument ID: MSD8

Calibration Date: 12/04/2014 Time: 1028

Lab File ID: 81204A04

Init. Calib. Date(s): 12/03/2014 12/03/2014

EPA Sample No. (VSTD#####): VSTD005NI

Init. Calib. Time(s): 0000 0153

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF 5.0	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.3029	0.2036	0.0100	-32.8	30.0
Chloroethane-d5	0.1791	0.1327	0.0100	-25.9	40.0
1,1-Dichloroethene-d2	0.6160	0.4301	0.0100	-30.2	30.0
2-Butanone-d5	0.0418	0.0443	0.0100	6.0	40.0
Chloroform-d	0.5537	0.4517	0.0100	-18.4	30.0
1,2-Dichloroethane-d4	0.2061	0.1853	0.0100	-10.1	30.0
Benzene-d6	1.6181	1.2490	0.0100	-22.8	30.0
1,2-Dichloropropane-d6	0.4519	0.3704	0.0100	-18.0	40.0
Toluene-d8	1.2986	1.0548	0.0100	-18.8	30.0
trans-1,3-Dichloropropene-d4	0.2399	0.2372	0.0100	-1.1	30.0
2-Hexanone-d5	0.0330	0.0368	0.0100	11.5	40.0
1,1,2,2-Tetrachloroethane-d2	0.1558	0.1552	0.0100	-0.4	30.0
1,2-Dichlorobenzene-d4	0.7888	0.7089	0.0100	-10.1	30.0

Shealy Environmental Services, Inc.

Continuing Calibration Verification Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A04.D
 Lab Sample ID: VSTD005NI Client Sample ID: VSTD005NI
 Injection Date: 04-Dec-2014 10:28:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 4
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Compound	Standard RRF	Ccal RF	Min. RRF	%D	Max. %D	%Rec
1 Dichlorodifluoromethane	0.389939	0.289486	0.01	-25.8	40	74
2 Chloromethane	0.492244	0.399597	0.01	-18.8	40	81
\$ 3 Vinyl Chloride-d3	0.302867	0.203586	0.01	* -32.8	30	67
4 Vinyl Chloride	0.441512	0.340987	0.1	-22.8	30	77
5 Bromomethane	0.218913	0.180234	0.1	-17.7	30	82
\$ 6 Chloroethane-d5	0.179127	0.13267	0.01	-25.9	40	74
7 Chloroethane	0.18632	0.151936	0.01	-18.5	40	82
8 Trichlorodifluoromethane	0.389604	0.281052	0.01	-27.9	40	72
\$ 12 1,1-Dichloroethene-d2	0.616019	0.430106	0.01	* -30.2	30	70
11 1,1,2-Trichloro-1,2,2-tr	0.234213	0.190133	0.01	-18.8	40	81
13 1,1-Dichloroethene	0.282621	0.234086	0.1	-17.2	30	83
14 Acetone	0.023526	0.020878	0.01	-11.3	40	89
15 Carbon Disulfide	0.904468	0.778584	0.01	-13.9	40	86
16 Methyl Acetate	0.11364	0.103906	0.01	-8.6	40	91
17 Methylene Chloride	0.30045	0.251001	0.01	-16.5	40	84
20 Methyl tert-Butyl Ether	0.385129	0.338776	0.01	-12	40	88
21 trans-1,2-Dichloroethene	0.32893	0.280884	0.01	-14.6	40	85
23 1,1-Dichloroethane	0.65118	0.560611	0.2	-13.9	30	86
\$ 25 2-Butanone-d5	0.041784	0.044275	0.01	6	40	106
26 cis-1,2-Dichloroethene	0.330934	0.289626	0.01	-12.5	40	88
28 2-Butanone	0.035902	0.031222	0.01	-13	40	87
29 Bromochloromethane	0.096565	0.090303	0.05	-6.5	30	94
\$ 30 Chloroform-d	0.553692	0.451704	0.01	-18.4	30	82
31 Chloroform	0.562894	0.480375	0.2	-14.7	30	85
33 1,1,1-Trichloroethane	0.587392	0.479642	0.1	-18.3	30	82
32 Cyclohexane	0.907695	0.672373	0.01	-25.9	40	74
34 Carbon Tetrachloride	0.474517	0.412031	0.1	-13.2	30	87
\$ 38 1,2-Dichloroethane-d4	0.206094	0.185347	0.01	-10.1	30	90
\$ 36 Benzene-d6	1.618109	1.249043	0.01	-22.8	30	77
37 Benzene	1.819756	1.532011	0.4	-15.8	30	84
39 1,2-Dichloroethane	0.253928	0.228432	0.1	-10	30	90
42 Trichloroethene	0.472703	0.38264	0.3	-19.1	30	81
\$ 44 1,2-Dichloropropane-d6	0.451873	0.370433	0.01	-18	40	82
43 Methylcyclohexane	0.800633	0.638889	0.01	-20.2	40	80
45 1,2-Dichloropropane	0.392995	0.353779	0.01	-10	40	90

Report Date: 05-Dec-2014 08:19:59

AIM Revision: 1.0 31-Oct-2014 07:30:18

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A04.D

Compound	Standard RRF	Ccal RF	Min. RRF	%D	Max. %D	%Rec
49 Bromodichloromethane	0.377945	0.341421	0.2	-9.7	30	90
50 cis-1,3-Dichloropropene	0.412408	0.408327	0.2	-1	30	99
51 4-Methyl-2-pentanone	0.097	0.08596	0.01	-11.4	40	89
\$ 52 Toluene-d8	1.298595	1.054787	0.01	-18.8	30	81
53 Toluene	1.595529	1.428219	0.4	-10.5	30	90
\$ 54 trans-1,3-Dichloropropene	0.239889	0.237201	0.01	-1.1	30	99
55 trans-1,3-Dichloropropene	0.250531	0.259259	0.1	3.5	30	103
56 1,1,2-Trichloroethane	0.144573	0.137654	0.1	-4.8	30	95
57 Tetrachloroethene	0.308635	0.266679	0.1	-13.6	30	86
\$ 58 2-Hexanone-d5	0.032984	0.036771	0.01	11.5	40	111
60 2-Hexanone	0.054523	0.051519	0.01	-5.5	40	94
61 Dibromochloromethane	0.146679	0.149496	0.1	1.9	30	102
62 1,2-Dibromoethane	0.133036	0.132099	0.01	-0.7	40	99
64 Chlorobenzene	0.872176	0.785676	0.5	-9.9	30	90
65 Ethylbenzene	1.716454	1.509826	0.1	-12	30	88
67 m+p-Xylenes	0.664912	0.586231	0.3	-11.8	30	88
68 o-Xylene	0.646192	0.565797	0.3	-12.4	30	88
69 Styrene	0.841083	0.780108	0.3	-7.2	30	93
70 Bromoform	0.127959	0.146353	0.05	14.4	30	114
71 Isopropylbenzene	1.736681	1.507773	0.01	-13.2	40	87
\$ 72 1,1,2,2-Tetrachloroethane	0.155805	0.155178	0.01	-0.4	30	100
74 1,1,2,2-Tetrachloroethane	0.154575	0.150466	0.1	-2.7	30	97
83 1,3-Dichlorobenzene	1.373018	1.276963	0.4	-7	30	93
86 1,4-Dichlorobenzene	1.308338	1.24139	0.4	-5.1	30	95
\$ 87 1,2-Dichlorobenzene-d4	0.788809	0.708924	0.01	-10.1	30	90
89 1,2-Dichlorobenzene	1.162321	1.062971	0.4	-8.5	30	91
90 1,2-Dibromo-3-chloroprop	0.037507	0.038805	0.01	3.5	40	103
91 1,2,4-Trichlorobenzene	0.854787	0.771315	0.2	-9.8	30	90
94 1,2,3-Trichlorobenzene	0.675986	0.771315	0.2	14.1	30	114

Report Date: 05-Dec-2014 08:19:59

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A04.D
 Lab Sample ID: VSTD005NI Client Sample ID: VSTD005NI
 Injection Date: 04-Dec-2014 10:28:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 4
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:07:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	31028	5.0000	3.7119	
2 Chloromethane	50.0	1.721	1.721	0.000	42830	5.0000	4.0589	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	21821	5.0000	3.3610	
4 Vinyl Chloride	62.0	1.827	1.827	0.000	36548	5.0000	3.8616	
5 Bromomethane	94.0	2.135	2.135	0.000	19318	5.0000	4.1166	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	14220	5.0000	3.7033	
7 Chloroethane	64.0	2.218	2.218	0.000	16285	5.0000	4.0773	
8 Trichlorofluoromethane	101.0	2.466	2.466	0.000	30124	5.0000	3.6069	
\$ 12 1,1-Dichloroethene-d2	63.0	2.975	2.975	0.000	46100	5.0000	3.4910	
13 1,1-Dichloroethene	96.0	2.987	2.987	0.000	25090	5.0000	4.1413	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	20379	5.0000	4.0590	
14 Acetone	43.0	3.011	3.011	0.000	22378	50.000	44.372	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	83451	5.0000	4.3041	
16 Methyl Acetate	43.0	3.401	3.401	0.000	11137	5.0000	4.5717	
17 Methylene Chloride	84.0	3.531	3.531	0.000	26903	5.0000	4.1771	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	36311	5.0000	4.3982	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	30106	5.0000	4.2697	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	60088	5.0000	4.3046	
\$ 25 2-Butanone-d5	46.0	5.093	5.093	0.000	47455	50.000	52.981	
26 cis-1,2-Dichloroethene	96.0	5.152	5.152	0.000	31043	5.0000	4.3759	
28 2-Butanone	43.0	5.164	5.164	0.000	33465	50.000	43.483	
29 Bromochloromethane	128.0	5.460	5.460	0.000	9679	5.0000	4.6758	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	48415	5.0000	4.0790	
31 Chloroform	83.0	5.567	5.567	0.000	51488	5.0000	4.2670	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	38074	5.0000	4.0828	
32 Cyclohexane	56.0	5.886	5.886	0.000	53373	5.0000	3.7037	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	32707	5.0000	4.3416	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.217	6.217	0.000	19866	5.0000	4.4967	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	99149	5.0000	3.8596	
37 Benzene	78.0	6.300	6.300	0.000	121611	5.0000	4.2094	
39 1,2-Dichloroethane	62.0	6.324	6.324	0.000	24484	5.0000	4.4980	
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	107183	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	30374	5.0000	4.0474	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	29405	5.0000	4.0989	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	50715	5.0000	3.9899	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	28083	5.0000	4.5011	
49 Bromodichloromethane	83.0	7.815	7.815	0.000	27102	5.0000	4.5168	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	32413	5.0000	4.9505	
51 4-Methyl-2-pentanone	43.0	8.643	8.643	0.000	68235	50.000	44.309	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	83729	5.0000	4.0613	
53 Toluene	91.0	8.880	8.880	0.000	113372	5.0000	4.4757	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	18829	5.0000	4.9440	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	20580	5.0000	5.1742	
56 1,1,2-Trichloroethane	97.0	9.412	9.412	0.000	10927	5.0000	4.7607	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	21169	5.0000	4.3203	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	29189	50.000	55.741	
60 2-Hexanone	43.0	9.732	9.732	0.000	40896	50.000	47.246	
61 Dibromochloromethane	129.0	9.874	9.874	0.000	11867	5.0000	5.0960	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	10486	5.0000	4.9648	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	79380	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	62367	5.0000	4.5041	
65 Ethylbenzene	91.0	10.631	10.631	0.000	119850	5.0000	4.3981	
67 m+p-Xylenes	106.0	10.749	10.749	0.000	46535	5.0000	4.4083	
68 o-Xylene	106.0	11.116	11.116	0.000	44913	5.0000	4.3779	
69 Styrene	104.0	11.128	11.128	0.000	61925	5.0000	4.6375	
70 Bromoform	173.0	11.294	11.294	0.000	5299	5.0000	5.7187	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	119687	5.0000	4.3410	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	12318	5.0000	4.9799	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	11944	5.0000	4.8671	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	46235	5.0000	4.6502	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	36207	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	44947	5.0000	4.7441	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	25668	5.0000	4.4936	
89 1,2-Dichlorobenzene	146.0	12.808	12.808	0.000	38487	5.0000	4.5726	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	1405	5.0000	5.1730	
91 1,2,4-Trichlorobenzene	180.0	13.944	13.944	0.000	27927	5.0000	4.5117	
94 1,2,3-Trichlorobenzene	180.0	13.944	13.944	0.000	27927	5.0000	5.7051	

Shealy Environmental Services, Inc.

Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A04.D
 Lab Sample ID: VSTD005NI Client Sample ID: VSTD005NI
 Injection Date: 04-Dec-2014 10:28:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 4
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ical Sample: /chem/msd8.i/8120214D.b/81202D06.D
 Sample Type: VSTD0.5MV Sublist: std.sub
 Inject. Date: 03-Dec-2014 01:53:30 Cal Amount: 0.50000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	91787	55073	128501	107183	116.8
* 63 Chlorobenzene-d5	61165	36699	85631	79380	129.8
* 85 1,4-Dichlorobenzene-d4	28783	17270	40296	36207	125.8

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	-0.001
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

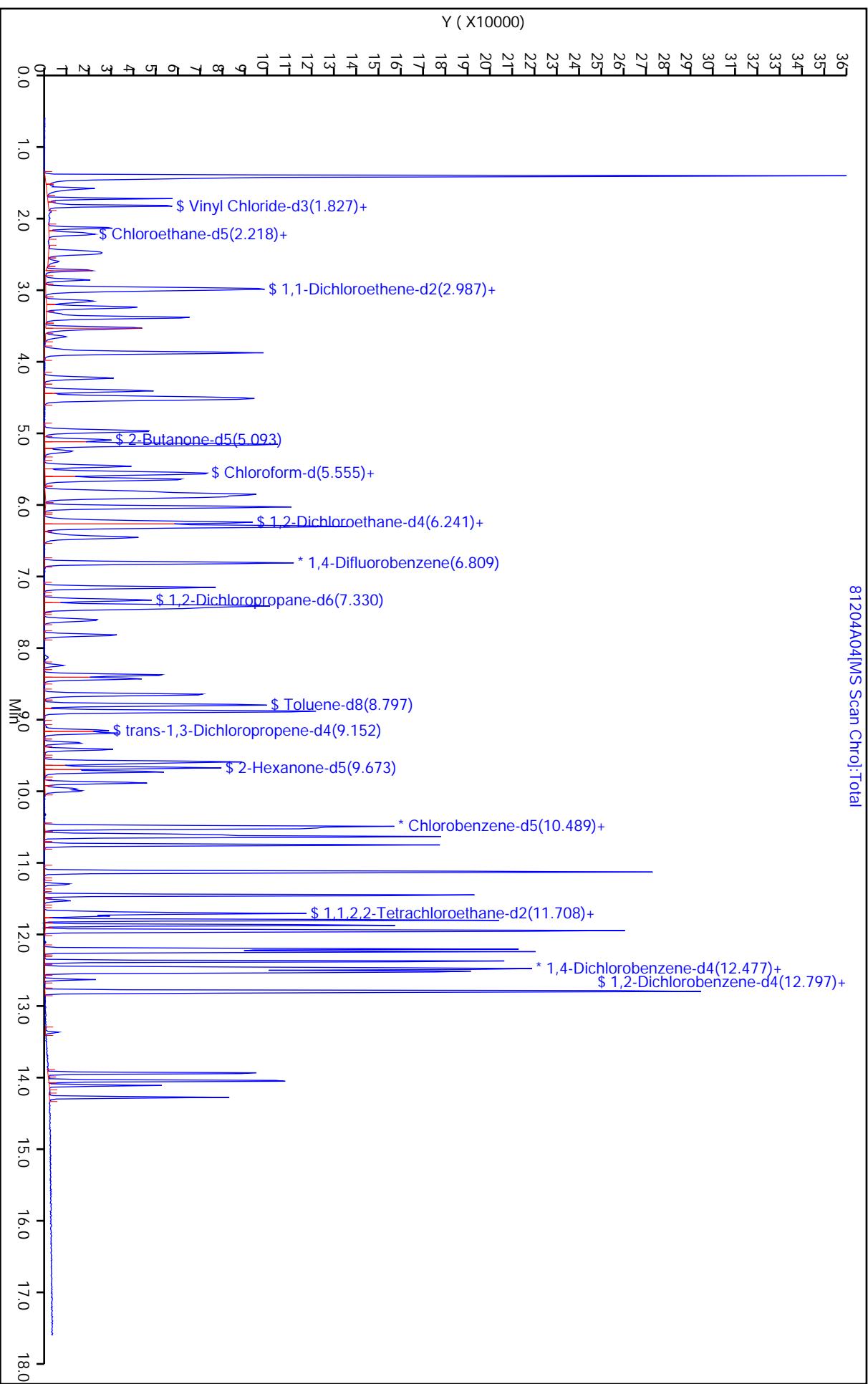
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A04.D
 Lab Sample ID: VSTD005NI Client Sample ID: VSTD005NI
 Injection Date: 04-Dec-2014 10:28:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 4
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	3.361	67.2	65- 131
\$ 6 Chloroethane-d5	5	3.7033	74.1	71- 131
\$ 12 1,1-Dichloroethene-d2	5	3.491	69.8	55- 104
\$ 25 2-Butanone-d5	50	52.981	106	49- 155
\$ 30 Chloroform-d	5	4.079	81.6	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.4967	89.9	78- 129
\$ 36 Benzene-d6	5	3.8596	77.2	77- 124
\$ 44 1,2-Dichloropropane-d6	5	4.0989	82	79- 124
\$ 52 Toluene-d8	5	4.0613	81.2	77- 121
\$ 54 trans-1,3-Dichloropropen	5	4.944	98.9	73- 121
\$ 58 2-Hexanone-d5	50	55.741	111.5	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	4.9799	99.6	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.4936	89.9	80- 131



7A - FORM VII VOA-1
VOLATILE CONTINUING CALIBRATION DATA

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Instrument ID: MSD8

Calibration Date: 12/04/2014 Time: 1815

Lab File ID: 81204A20

Init. Calib. Date(s): 12/03/2014 12/03/2014

EPA Sample No. (VSTD#####): VSTD005NL

Init. Calib. Time(s): 0000 0153

Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)

Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF 5.0	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.3899	0.2898	0.0100	-25.7	50.0
Chloromethane	0.4922	0.4144	0.0100	-15.8	50.0
Vinyl chloride	0.4415	0.3607	0.0100	-18.3	50.0
Bromomethane	0.2189	0.1940	0.0100	-11.4	50.0
Chloroethane	0.1863	0.1603	0.0100	-13.9	50.0
Trichlorodifluoromethane	0.3896	0.2849	0.0100	-26.9	50.0
1,1-Dichloroethene	0.2826	0.2325	0.0100	-17.7	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2342	0.1942	0.0100	-17.1	50.0
Acetone	0.0235	0.0210	0.0100	-10.6	50.0
Carbon disulfide	0.9045	0.7993	0.0100	-11.6	50.0
Methyl acetate	0.1136	0.1141	0.0100	0.4	50.0
Methylene chloride	0.3004	0.2623	0.0100	-12.7	50.0
trans-1,2-Dichloroethene	0.3289	0.2879	0.0100	-12.5	50.0
Methyl tert-Butyl Ether	0.3851	0.3551	0.0100	-7.8	50.0
1,1-Dichloroethane	0.6512	0.5841	0.0100	-10.3	50.0
cis-1,2-Dichloroethene	0.3309	0.3074	0.0100	-7.1	50.0
2-Butanone	0.0359	0.0326	0.0100	-9.2	50.0
Bromochloromethane	0.0966	0.0956	0.0100	-1.0	50.0
Chloroform	0.5629	0.5182	0.0100	-7.9	50.0
1,1,1-Trichloroethane	0.5874	0.5003	0.0100	-14.8	50.0
Cyclohexane	0.9077	0.7125	0.0100	-21.5	50.0
Carbon tetrachloride	0.4745	0.4121	0.0100	-13.2	50.0
Benzene	1.8198	1.6085	0.0100	-11.6	50.0
1,2-Dichloroethane	0.2539	0.2337	0.0100	-8.0	50.0
Trichloroethene	0.4727	0.4109	0.0100	-13.1	50.0
Methylcyclohexane	0.8006	0.6742	0.0100	-15.8	50.0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035
 Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2
 Instrument ID: MSD8 Calibration Date: 12/04/2014 Time: 1815
 Lab File ID: 81204A20 Init. Calib. Date(s): 12/03/2014 12/03/2014
 EPA Sample No. (VSTD#####): VSTD005NL Init. Calib. Time(s): 0000 0153
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF <u>5.0</u>	MIN RRF	%D	MAX %D
1,2-Dichloropropane	0.3930	0.3735	0.0100	-5.0	50.0
Bromodichloromethane	0.3779	0.3506	0.0100	-7.2	50.0
cis-1,3-Dichloropropene	0.4124	0.4125	0.0100	0.0	50.0
4-Methyl-2-pentanone	0.0970	0.0941	0.0100	-3.0	50.0
Toluene	1.5955	1.4687	0.0100	-8.0	50.0
trans-1,3-Dichloropropene	0.2505	0.2541	0.0100	1.4	50.0
1,1,2-Trichloroethane	0.1446	0.1471	0.0100	1.8	50.0
Tetrachloroethene	0.3086	0.2858	0.0100	-7.4	50.0
2-Hexanone	0.0545	0.0547	0.0100	0.3	50.0
Dibromochloromethane	0.1467	0.1583	0.0100	7.9	50.0
1,2-Dibromoethane	0.1330	0.1393	0.0100	4.7	50.0
Chlorobenzene	0.8722	0.8231	0.0100	-5.6	50.0
Ethylbenzene	1.7165	1.6012	0.0100	-6.7	50.0
o-Xylene	0.6462	0.5859	0.0100	-9.3	50.0
m,p-Xylene	0.6649	0.6066	0.0100	-8.8	50.0
Styrene	0.8411	0.8364	0.0100	-0.6	50.0
Bromoform	0.1280	0.1349	0.0100	5.4	50.0
Isopropylbenzene	1.7367	1.5991	0.0100	-7.9	50.0
1,1,2,2-Tetrachloroethane	0.1546	0.1640	0.0100	6.1	50.0
1,3-Dichlorobenzene	1.3730	1.2588	0.0100	-8.3	50.0
1,4-Dichlorobenzene	1.3083	1.2279	0.0100	-6.1	50.0
1,2-Dichlorobenzene	1.1623	1.0540	0.0100	-9.3	50.0
1,2-Dibromo-3-chloropropane	0.0375	0.0388	0.0100	3.5	50.0
1,2,4-Trichlorobenzene	0.8548	0.7095	0.0100	-17.0	50.0
1,2,3-Trichlorobenzene	0.6760	0.7095	0.0100	5.0	50.0

Lab Name: Shealy Environmental Services, Inc. Contract: EP-W-11-035
 Lab Code: SHEALY Case No.: 44903 Mod. Ref No.: _____ SDG No.: E5AZ2
 Instrument ID: MSD8 Calibration Date: 12/04/2014 Time: 1815
 Lab File ID: 81204A20 Init. Calib. Date(s): 12/03/2014 12/03/2014
 EPA Sample No. (VSTD#####): VSTD005NL Init. Calib. Time(s): 0000 0153
 Heated Purge: (Y/N) N GC Column: DB-624 ID: 0.25 (mm) Length: 30.0 (m)
 Purge Volume: 25.0 (mL)

COMPOUND	RRF	RRF <u>5.0</u>	MIN RRF	%D	MAX %D
Vinyl Chloride-d3	0.3029	0.2380	0.0100	-21.4	50.0
Chloroethane-d5	0.1791	0.1505	0.0100	-16.0	50.0
1,1-Dichloroethene-d2	0.6160	0.4715	0.0100	-23.5	50.0
2-Butanone-d5	0.0418	0.0410	0.0100	-1.9	50.0
Chloroform-d	0.5537	0.5002	0.0100	-9.7	50.0
1,2-Dichloroethane-d4	0.2061	0.2054	0.0100	-0.4	50.0
Benzene-d6	1.6181	1.3992	0.0100	-13.5	50.0
1,2-Dichloropropane-d6	0.4519	0.4113	0.0100	-9.0	50.0
Toluene-d8	1.2986	1.1521	0.0100	-11.3	50.0
trans-1,3-Dichloropropene-d4	0.2399	0.2433	0.0100	1.4	50.0
2-Hexanone-d5	0.0330	0.0348	0.0100	5.6	50.0
1,1,2,2-Tetrachloroethane-d2	0.1558	0.1803	0.0100	15.7	50.0
1,2-Dichlorobenzene-d4	0.7888	0.7369	0.0100	-6.6	50.0

Shealy Environmental Services, Inc.

Continuing Calibration Verification Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A20.D
 Lab Sample ID: VSTD005NL Client Sample ID: VSTD005NL
 Injection Date: 04-Dec-2014 18:15:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NL
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8e.m
 Method Date: 05-Dec-2014 07:43:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 20
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Compound	Standard RRF	Ccal RF	Min. RRF	%D	Max. %D	%Rec
1 Dichlorodifluoromethane	0.389939	0.289796	0.01	-25.7	50	74
2 Chloromethane	0.492244	0.4144	0.01	-15.8	50	84
\$ 3 Vinyl Chloride-d3	0.302867	0.237996	0.01	-21.4	50	79
4 Vinyl Chloride	0.441512	0.360743	0.01	-18.3	50	82
5 Bromomethane	0.218913	0.194031	0.01	-11.4	50	89
\$ 6 Chloroethane-d5	0.179127	0.150504	0.01	-16	50	84
7 Chloroethane	0.18632	0.160336	0.01	-13.9	50	86
8 Trichlorodifluoromethane	0.389604	0.28492	0.01	-26.9	50	73
\$ 12 1,1-Dichloroethene-d2	0.616019	0.471513	0.01	-23.5	50	77
11 1,1,2-Trichloro-1,2,2-tr	0.234213	0.19424	0.01	-17.1	50	83
13 1,1-Dichloroethene	0.282621	0.232534	0.01	-17.7	50	82
14 Acetone	0.023526	0.021035	0.01	-10.6	50	89
15 Carbon Disulfide	0.904468	0.799325	0.01	-11.6	50	88
16 Methyl Acetate	0.11364	0.114067	0.01	0.4	50	100
17 Methylene Chloride	0.30045	0.262327	0.01	-12.7	50	87
20 Methyl tert-Butyl Ether	0.385129	0.355082	0.01	-7.8	50	92
21 trans-1,2-Dichloroethene	0.32893	0.287939	0.01	-12.5	50	88
23 1,1-Dichloroethane	0.65118	0.58414	0.01	-10.3	50	90
\$ 25 2-Butanone-d5	0.041784	0.040979	0.01	-1.9	50	98
26 cis-1,2-Dichloroethene	0.330934	0.307413	0.01	-7.1	50	93
28 2-Butanone	0.035902	0.032612	0.01	-9.2	50	91
29 Bromochloromethane	0.096565	0.095556	0.01	-1	50	99
\$ 30 Chloroform-d	0.553692	0.500233	0.01	-9.7	50	90
31 Chloroform	0.562894	0.518208	0.01	-7.9	50	92
33 1,1,1-Trichloroethane	0.587392	0.500323	0.01	-14.8	50	85
32 Cyclohexane	0.907695	0.712492	0.01	-21.5	50	78
34 Carbon Tetrachloride	0.474517	0.412063	0.01	-13.2	50	87
\$ 38 1,2-Dichloroethane-d4	0.206094	0.205363	0.01	-0.4	50	100
\$ 36 Benzene-d6	1.618109	1.399197	0.01	-13.5	50	86
37 Benzene	1.819756	1.608509	0.01	-11.6	50	88
39 1,2-Dichloroethane	0.253928	0.233716	0.01	-8	50	92
42 Trichloroethene	0.472703	0.410878	0.01	-13.1	50	87
\$ 44 1,2-Dichloropropane-d6	0.451873	0.411309	0.01	-9	50	91
43 Methylcyclohexane	0.800633	0.674162	0.01	-15.8	50	84
45 1,2-Dichloropropane	0.392995	0.373478	0.01	-5	50	95

Report Date: 05-Dec-2014 08:20:22

AIM Revision: 1.0 31-Oct-2014 07:30:18

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A20.D

Compound	Standard RRF	Ccal RF	Min. RRF	%D	Max. %D	%Rec
49 Bromodichloromethane	0.377945	0.350614	0.01	-7.2	50	93
50 cis-1,3-Dichloropropene	0.412408	0.412549	0.01	0	50	100
51 4-Methyl-2-pentanone	0.097	0.094081	0.01	-3	50	97
\$ 52 Toluene-d8	1.298595	1.15208	0.01	-11.3	50	89
53 Toluene	1.595529	1.468676	0.01	-8	50	92
\$ 54 trans-1,3-Dichloropropen	0.239889	0.243264	0.01	1.4	50	101
55 trans-1,3-Dichloropropen	0.250531	0.254082	0.01	1.4	50	101
56 1,1,2-Trichloroethane	0.144573	0.147149	0.01	1.8	50	102
57 Tetrachloroethene	0.308635	0.28577	0.01	-7.4	50	93
\$ 58 2-Hexanone-d5	0.032984	0.034842	0.01	5.6	50	106
60 2-Hexanone	0.054523	0.05469	0.01	0.3	50	100
61 Dibromochloromethane	0.146679	0.158318	0.01	7.9	50	108
62 1,2-Dibromoethane	0.133036	0.139254	0.01	4.7	50	105
64 Chlorobenzene	0.872176	0.823076	0.01	-5.6	50	94
65 Ethylbenzene	1.716454	1.601234	0.01	-6.7	50	93
67 m+p-Xylenes	0.664912	0.606583	0.01	-8.8	50	91
68 o-Xylene	0.646192	0.585875	0.01	-9.3	50	91
69 Styrene	0.841083	0.836387	0.01	-0.6	50	99
70 Bromoform	0.127959	0.13491	0.01	5.4	50	105
71 Isopropylbenzene	1.736681	1.599105	0.01	-7.9	50	92
\$ 72 1,1,2,2-Tetrachloroethan	0.155805	0.180252	0.01	15.7	50	116
74 1,1,2,2-Tetrachloroethan	0.154575	0.164004	0.01	6.1	50	106
83 1,3-Dichlorobenzene	1.373018	1.258839	0.01	-8.3	50	92
86 1,4-Dichlorobenzene	1.308338	1.227919	0.01	-6.1	50	94
\$ 87 1,2-Dichlorobenzene-d4	0.788809	0.736863	0.01	-6.6	50	93
89 1,2-Dichlorobenzene	1.162321	1.053964	0.01	-9.3	50	91
90 1,2-Dibromo-3-chloroprop	0.037507	0.038823	0.01	3.5	50	104
91 1,2,4-Trichlorobenzene	0.854787	0.70952	0.01	-17	50	83
94 1,2,3-Trichlorobenzene	0.675986	0.70952	0.01	5	50	105

Report Date: 05-Dec-2014 08:20:22

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A20.D
 Lab Sample ID: VSTD005NL Client Sample ID: VSTD005NL
 Injection Date: 04-Dec-2014 18:15:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NL
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8e.m
 Method Date: 05-Dec-2014 07:43:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 20
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:15:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
1 Dichlorodifluoromethane	85.0	1.579	1.579	0.000	29181	5.0000	3.7159	
2 Chloromethane	50.0	1.721	1.721	0.000	41728	5.0000	4.2093	
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	23965	5.0000	3.9290	
4 Vinyl Chloride	62.0	1.828	1.828	0.000	36325	5.0000	4.0853	
5 Bromomethane	94.0	2.123	2.123	0.000	19538	5.0000	4.4317	
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	15155	5.0000	4.2011	
7 Chloroethane	64.0	2.218	2.218	0.000	16145	5.0000	4.3027	
8 Trichlorofluoromethane	101.0	2.467	2.467	0.000	28690	5.0000	3.6565	
\$ 12 1,1-Dichloroethene-d2	63.0	2.975	2.975	0.000	47479	5.0000	3.8271	
13 1,1-Dichloroethene	96.0	2.975	2.975	0.000	23415	5.0000	4.1139	
11 1,1,2-Trichloro-1,2,2-trifluo	101.0	2.987	2.987	0.000	19559	5.0000	4.1466	
14 Acetone	43.0	3.011	3.011	0.000	21181	50.000	44.705	
15 Carbon Disulfide	76.0	3.236	3.236	0.000	80488	5.0000	4.4188	
16 Methyl Acetate	43.0	3.401	3.401	0.000	11486	5.0000	5.0188	
17 Methylene Chloride	84.0	3.532	3.532	0.000	26415	5.0000	4.3656	
20 Methyl tert-Butyl Ether	73.0	3.875	3.875	0.000	35755	5.0000	4.6099	
21 trans-1,2-Dichloroethene	96.0	3.875	3.875	0.000	28994	5.0000	4.3769	
23 1,1-Dichloroethane	63.0	4.407	4.407	0.000	58820	5.0000	4.4852	
\$ 25 2-Butanone-d5	46.0	5.094	5.094	0.000	41264	50.000	49.037	
26 cis-1,2-Dichloroethene	96.0	5.153	5.153	0.000	30955	5.0000	4.6446	
28 2-Butanone	43.0	5.165	5.165	0.000	32839	50.000	45.419	
29 Bromochloromethane	128.0	5.460	5.460	0.000	9622	5.0000	4.9478	
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	50371	5.0000	4.5173	
31 Chloroform	83.0	5.567	5.567	0.000	52181	5.0000	4.6031	
33 1,1,1-Trichloroethane	97.0	5.815	5.815	0.000	37136	5.0000	4.2589	
32 Cyclohexane	56.0	5.886	5.886	0.000	52884	5.0000	3.9247	
34 Carbon Tetrachloride	117.0	6.028	6.028	0.000	30585	5.0000	4.3419	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	Cal Amt ug/L	OnCol Amt ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.000	20679	5.0000	4.9823	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	103854	5.0000	4.3236	
37 Benzene	78.0	6.301	6.301	0.000	119390	5.0000	4.4196	
39 1,2-Dichloroethane	62.0	6.312	6.312	0.000	23534	5.0000	4.6020	
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	100695	5.0000	5.0000	
42 Trichloroethene	95.0	7.152	7.152	0.000	30497	5.0000	4.3460	
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	30529	5.0000	4.5512	
43 Methylcyclohexane	83.0	7.413	7.413	0.000	50039	5.0000	4.2102	
45 1,2-Dichloropropane	63.0	7.448	7.448	0.000	27721	5.0000	4.7517	
49 Bromodichloromethane	83.0	7.815	7.815	0.000	26024	5.0000	4.6384	
50 cis-1,3-Dichloropropene	75.0	8.430	8.430	0.000	30621	5.0000	5.0017	
51 4-Methyl-2-pentanone	43.0	8.643	8.643	0.000	69831	50.000	48.496	
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	85512	5.0000	4.4359	
53 Toluene	91.0	8.880	8.880	0.000	109011	5.0000	4.6025	
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	18056	5.0000	5.0703	
55 trans-1,3-Dichloropropene	75.0	9.188	9.188	0.000	18859	5.0000	5.0709	
56 1,1,2-Trichloroethane	97.0	9.413	9.413	0.000	10922	5.0000	5.0891	
57 Tetrachloroethene	164.0	9.590	9.590	0.000	21211	5.0000	4.6296	
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	25861	50.000	52.816	
60 2-Hexanone	43.0	9.732	9.732	0.000	40593	50.000	50.153	
61 Dibromochloromethane	129.0	9.874	9.874	0.000	11751	5.0000	5.3968	
62 1,2-Dibromoethane	107.0	9.992	9.992	0.000	10336	5.0000	5.2337	
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	74224	5.0000	5.0000	
64 Chlorobenzene	112.0	10.525	10.525	0.000	61092	5.0000	4.7185	
65 Ethylbenzene	91.0	10.631	10.631	0.000	118850	5.0000	4.6644	
67 m+p-Xylenes	106.0	10.750	10.750	0.000	45023	5.0000	4.5614	
68 o-Xylene	106.0	11.117	11.117	0.000	43486	5.0000	4.5333	
69 Styrene	104.0	11.128	11.128	0.000	62080	5.0000	4.9721	
70 Bromoform	173.0	11.294	11.294	0.000	4865	5.0000	5.2716	
71 Isopropylbenzene	105.0	11.448	11.448	0.000	118692	5.0000	4.6039	
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	13379	5.0000	5.7845	
74 1,1,2,2-Tetrachloroethane	83.0	11.708	11.708	0.000	12173	5.0000	5.3050	
83 1,3-Dichlorobenzene	146.0	12.465	12.465	0.000	45395	5.0000	4.5842	
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	36061	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0	12.536	12.536	0.000	44280	5.0000	4.6927	
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	26572	5.0000	4.6707	
89 1,2-Dichlorobenzene	146.0	12.809	12.809	0.000	38007	5.0000	4.5339	
90 1,2-Dibromo-3-chloropropane	75.0	13.365	13.365	0.000	1400	5.0000	5.1755	
91 1,2,4-Trichlorobenzene	180.0	13.945	13.945	0.000	25586	5.0000	4.1503	
94 1,2,3-Trichlorobenzene	180.0	13.945	13.945	0.000	25586	5.0000	5.2480	

Shealy Environmental Services, Inc.

Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A20.D
 Lab Sample ID: VSTD005NL Client Sample ID: VSTD005NL
 Injection Date: 04-Dec-2014 18:15:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NL
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8e.m
 Method Date: 05-Dec-2014 07:43:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 20
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ical Sample: /chem/msd8.i/8120214D.b/81202D06.D
 Sample Type: VSTD0.5MV Sublist: std.sub
 Inject. Date: 03-Dec-2014 01:53:30 Cal Amount: 0.50000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	91787	55073	128501	100695	109.7
* 63 Chlorobenzene-d5	61165	36699	85631	74224	121.4
* 85 1,4-Dichlorobenzene-d4	28783	17270	40296	36061	125.3

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	0.003
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0.002
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0.002

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

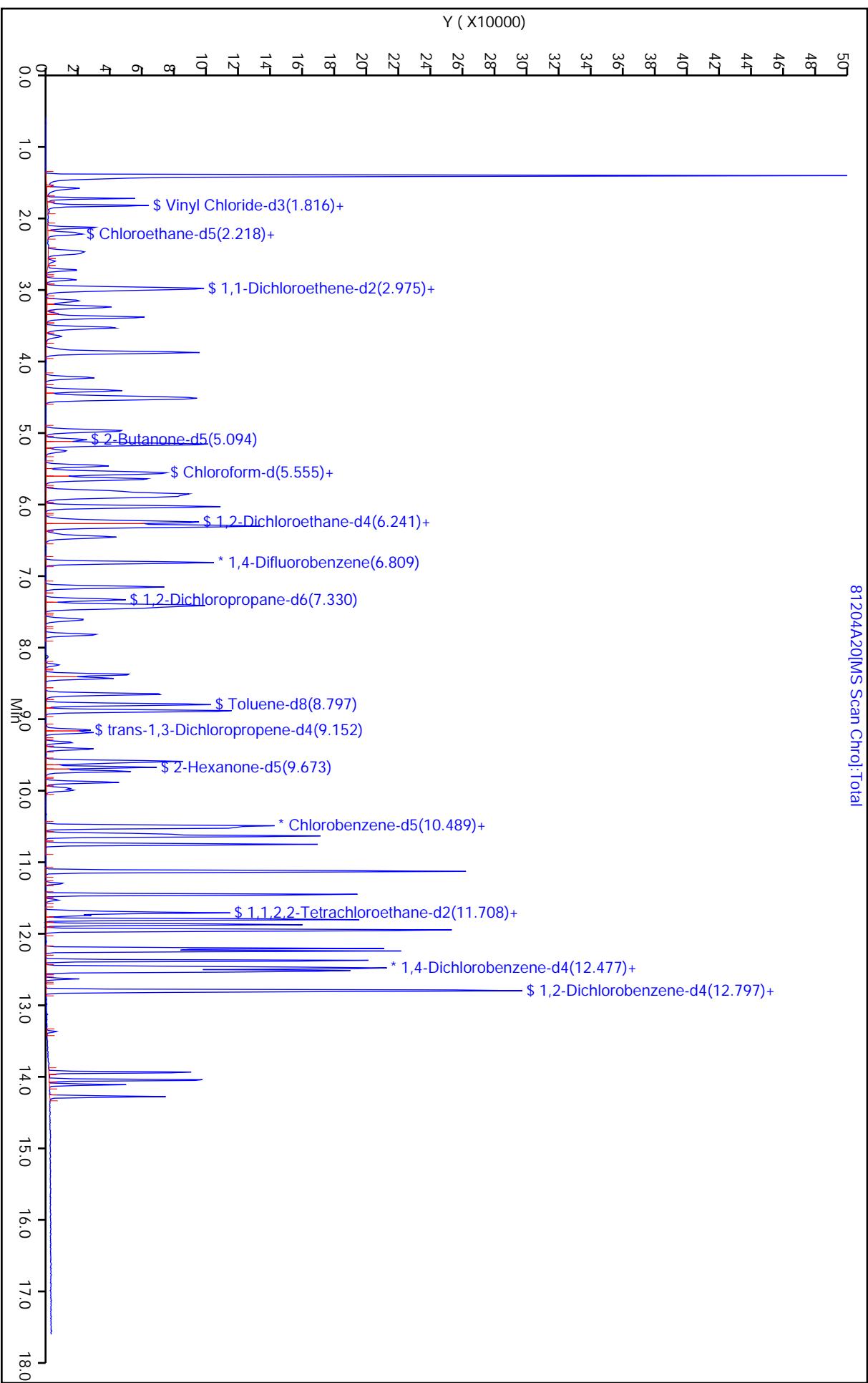
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A20.D
 Lab Sample ID: VSTD005NL Client Sample ID: VSTD005NL
 Injection Date: 04-Dec-2014 18:15:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VSTD005NL
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8e.m
 Method Date: 05-Dec-2014 07:43:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: CCV ALS Bottle: 20
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	3.929	78.6	65- 131
\$ 6 Chloroethane-d5	5	4.2011	84	71- 131
\$ 12 1,1-Dichloroethene-d2	5	3.8271	76.5	55- 104
\$ 25 2-Butanone-d5	50	49.037	98.1	49- 155
\$ 30 Chloroform-d	5	4.5173	90.3	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.9823	99.6	78- 129
\$ 36 Benzene-d6	5	4.3236	86.5	77- 124
\$ 44 1,2-Dichloropropane-d6	5	4.5512	91	79- 124
\$ 52 Toluene-d8	5	4.4359	88.7	77- 121
\$ 54 trans-1,3-Dichloropropen	5	5.0703	101.4	73- 121
\$ 58 2-Hexanone-d5	50	52.816	105.6	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	5.7845	115.7	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.6707	93.4	80- 131



4. Raw QC Data

- a. BFB Data**
- b. Blank Data**

a. BFB Data

Arrange in chronological order, by instrument.

- Reconstructed total ion chromatogram
- Bar Graph spectrum and Tabulated Relative Abundances
- Mass listing

Report Date: 03-Dec-2014 08:52:26

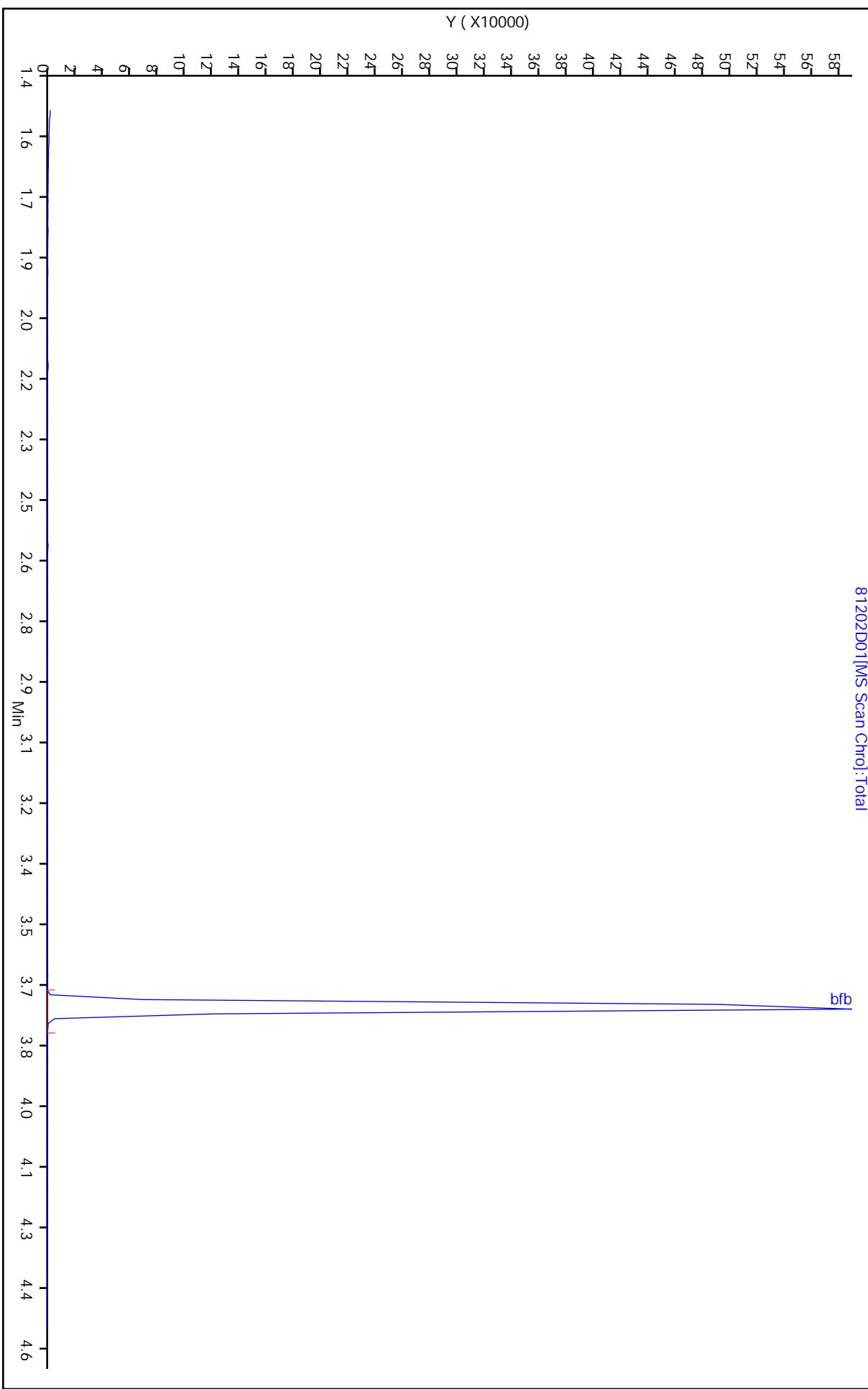
AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.i\\8120202D01.D
 Injection Date: 02-Dec-2014 23:35:30
 Client ID: BFBMV
 Sample Info: 8120214D.b, BFBMV
 Injection Vol: 2.00 uL
 Column1: DB-624 (0.25 mm)

Operator: PMM2
 Inst. ID: msd8.i
 Lab ID: BFBMV
 Dil. Factor: 1.0
 Detector: MS Scan

8120202D01[MS Scan Chro]:Total



Report Date: 03-Dec-2014 08:52:27

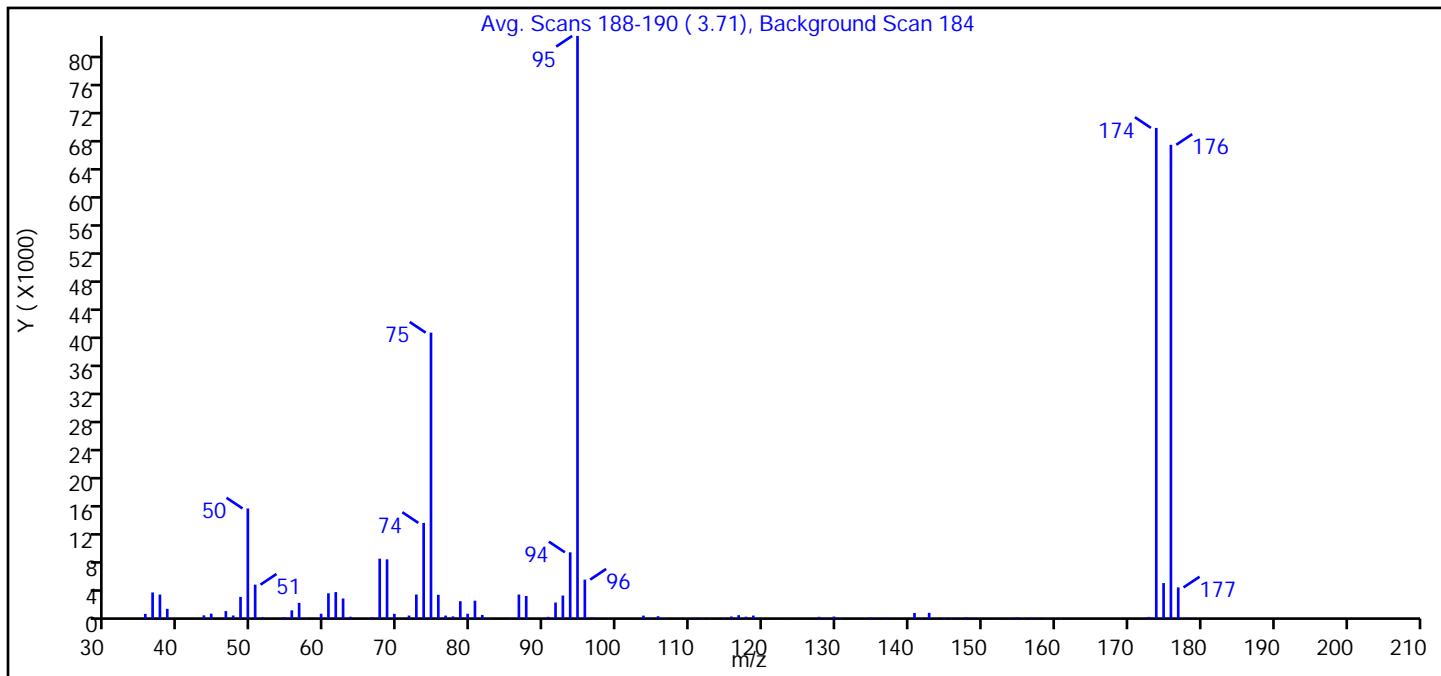
AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

MS Tune Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120214D.b\\81202D01.D
 Injection Date: 02-Dec-2014 23:35:30 Inst. ID: msd8.i
 Client ID: BFBMV Lab ID: BFBMV
 Sample Info: 8120214D.b, BFBMV
 Injection Vol. 2.00 uL Dil. Factor: 1.0
 Operator: PMM2 Detector: MS Scan
 Column1: DB-624 (0.25 mm)

1 bfb



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.0
50	15.00 - 40.00% of mass 95	18.9
75	30.00 - 80.00% of mass 95	49.1
96	5.00 - 9.00% of mass 95	6.7
173	Less than 2.00% of mass 174	0.3 (0.3)
174	50.00 - 120.00% of mass 95	84.2
175	5.00 - 9.00% of mass 174	6.1 (7.2)
176	95.00 - 101.00% of mass 174	81.3 (96.6)
177	5.00 - 9.00% of mass 176	5.4 (6.6)

Report Date: 03-Dec-2014 08:52:27

Data File: \\Organics\DD\chem\msd8.i\8120214D.b\81202D01.D
 Injection Date: 02-Dec-2014 23:35:30
 Spectrum: Avg. Scans 188-190 (3.71), Background Scan 184
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 103

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	666	67.00	180	97.00	185	143.00	813
37.00	3684	68.00	8448	103.00	22	144.00	43
38.00	3390	69.00	8357	104.00	418	145.00	81
39.00	1377	70.00	678	105.00	101	146.00	91
40.00	4	71.00	19	106.00	339	147.00	32
41.00	16	72.00	431	107.00	66	148.00	187
43.00	23	73.00	3392	110.00	37	149.00	50
44.00	457	74.00	13498	111.00	72	150.00	60
45.00	700	75.00	40328	112.00	57	152.00	21
46.00	52	76.00	3356	113.00	67	153.00	46
47.00	1063	77.00	426	115.00	63	154.00	49
48.00	436	78.00	314	116.00	295	155.00	179
49.00	3059	79.00	2452	117.00	480	156.00	23
50.00	15534	80.00	684	118.00	265	157.00	133
51.00	4787	81.00	2525	119.00	426	158.00	18
52.00	199	82.00	517	124.00	45	159.00	60
55.00	216	83.00	61	128.00	253	161.00	93
56.00	1164	86.00	85	129.00	110	172.00	55
57.00	2222	87.00	3393	130.00	291	173.00	238
58.00	82	88.00	3187	131.00	102	174.00	69200
60.00	682	91.00	248	135.00	139	175.00	5013
61.00	3569	92.00	2269	136.00	18	176.00	66816
62.00	3738	93.00	3253	137.00	137	177.00	4401
63.00	2832	94.00	9348	140.00	48	178.00	130
64.00	265	95.00	82168	141.00	797	207.00	21
65.00	16	96.00	5498	142.00	108		

Shealy Environmental Services, Inc.

Data File: \\Organics\\DD\\chem\\msd8.l\\8120414.b\\81204A01.D

Injection Date: 04-Dec-2014 09:06:30

Client ID: BFBNI

Sample Info: 8120414.b, BFBNI

Injection Vol. 2.00 uL

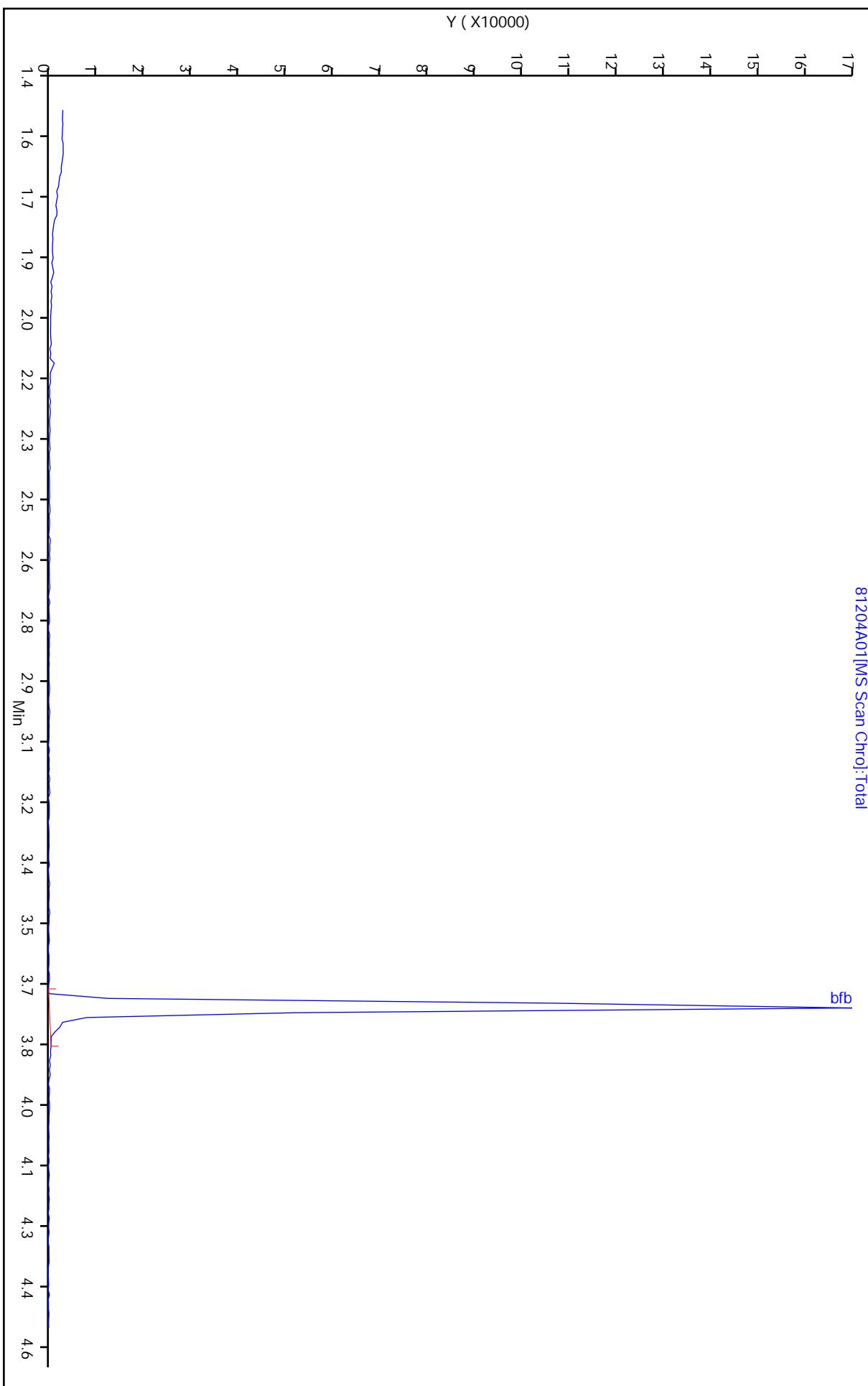
Column1: DB-624 (0.25 mm)

Inst. ID: msd8.i
Lab ID: BFBNI

Operator: ALL

Dil. Factor: 1.0
Detector: MS Scan

81204A01[MS Scan Chro]:Total



Report Date: 05-Dec-2014 08:19:55

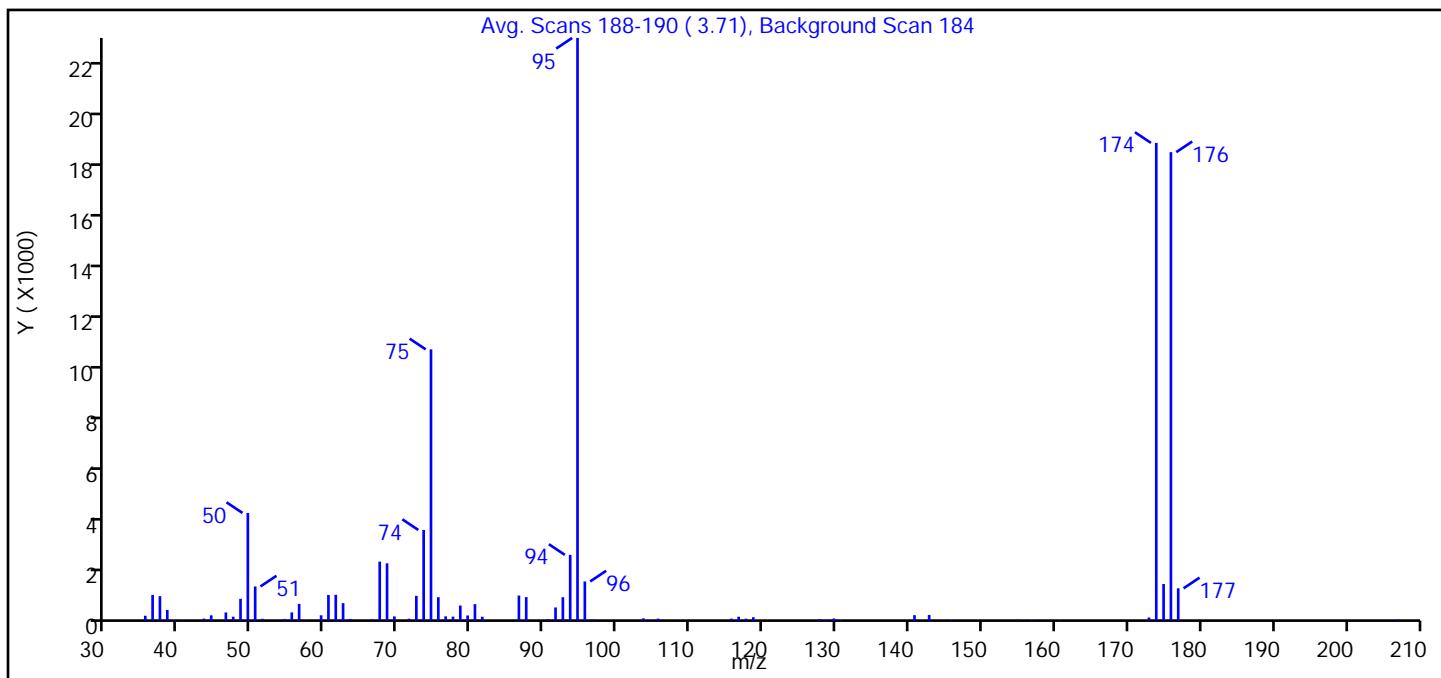
AIM Revision: 1.0 31-Oct-2014 07:30:18

Shealy Environmental Services, Inc.

MS Tune Report

Data File: \\Organics\\DD\\chem\\msd8.i\\8120414.b\\81204A01.D
 Injection Date: 04-Dec-2014 09:06:30 Inst. ID: msd8.i
 Client ID: BFBNI Lab ID: BFBNI
 Sample Info: 8120414.b, BFBNI
 Injection Vol. 2.00 uL Dil. Factor: 1.0
 Operator: ALL Detector: MS Scan
 Column1: DB-624 (0.25 mm)

1 bfb



m/z	Ion Abundance Criteria	% Relative Abundance
95	Base Peak, 100% relative abundance	100.0
50	15.00 - 40.00% of mass 95	18.5
75	30.00 - 80.00% of mass 95	46.6
96	5.00 - 9.00% of mass 95	6.7
173	Less than 2.00% of mass 174	0.5 (0.7)
174	50.00 - 120.00% of mass 95	82.0
175	5.00 - 9.00% of mass 174	6.3 (7.7)
176	95.00 - 101.00% of mass 174	80.4 (98.1)
177	5.00 - 9.00% of mass 176	5.5 (6.9)

Report Date: 05-Dec-2014 08:19:55

AIM Revision: 1.0 31-Oct-2014 07:30:18

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A01.D
 Injection Date: 04-Dec-2014 09:06:30
 Spectrum: Avg. Scans 188-190 (3.71), Background Scan 184
 Base Peak: 95.00
 Minimum % Base Peak: 0
 Number of Points: 71

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	184	60.00	202	81.00	625	128.00	61
37.00	974	61.00	973	82.00	147	129.00	29
38.00	928	62.00	979	87.00	951	130.00	81
39.00	405	63.00	663	88.00	892	131.00	22
40.00	25	64.00	63	91.00	60	141.00	207
41.00	19	67.00	49	92.00	499	142.00	20
44.00	77	68.00	2239	93.00	887	143.00	215
45.00	201	69.00	2174	94.00	2495	146.00	19
47.00	309	70.00	160	95.00	22120	155.00	34
48.00	147	72.00	72	96.00	1486	157.00	20
49.00	827	73.00	940	97.00	37	161.00	16
50.00	4086	74.00	3440	104.00	85	173.00	119
51.00	1297	75.00	10298	105.00	17	174.00	18136
52.00	69	76.00	888	106.00	75	175.00	1390
55.00	63	77.00	162	116.00	75	176.00	17784
56.00	312	78.00	151	117.00	148	177.00	1226
57.00	634	79.00	571	118.00	72	207.00	38
58.00	18	80.00	195	119.00	128		

b. Blank Data

Arrange by type of blank (method, storage, instrument) in chronological order, by instrument.

VBLKNI

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PQ62321-001

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A05

Level: (TRACE/LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

VBLKNI

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PQ62321-001

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A05

Level: (TRACE/LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

VBLKNI

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PQ62321-001

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A05

Level: (TRACE or LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

Report Date: 05-Dec-2014 08:20:00

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A05.D
 Lab Sample ID: VBLKNI Client Sample ID: VBLKNI
 Injection Date: 04-Dec-2014 11:02:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VBLKNI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: BLANK ALS Bottle: 5
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Data Reviewer: all

Detector: MS Scan

Review Date: 05-Dec-2014 08:07:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
1 Dichlorodifluoromethane	85.0		1.579		ND			
2 Chloromethane	50.0		1.721		ND			
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	31742	5.4838	5.4837	
4 Vinyl Chloride	62.0		1.827		ND			
5 Bromomethane	94.0		2.135		ND			
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	18721	5.4685	5.4684	
7 Chloroethane	64.0		2.218		ND			
8 Trichlorofluoromethane	101.0		2.466		ND			
\$ 12 1,1-Dichloroethene-d2	63.0	2.964	2.964	-0.011	45031	3.8249	3.8248	
13 1,1-Dichloroethene	96.0		2.987		ND			
11 1,1,2-Trichloro-1,2,2-trifluo	101.0		2.987		ND			
14 Acetone	43.0		3.011		ND			
15 Carbon Disulfide	76.0		3.236		ND			
16 Methyl Acetate	43.0		3.401		ND			
17 Methylene Chloride	84.0		3.531		ND			
20 Methyl tert-Butyl Ether	73.0		3.875		ND			
21 trans-1,2-Dichloroethene	96.0		3.875		ND			
23 1,1-Dichloroethane	63.0		4.407		ND			
\$ 25 2-Butanone-d5	46.0	5.094	5.094	0.001	37803	47.339	47.339	
26 cis-1,2-Dichloroethene	96.0		5.152		ND			
28 2-Butanone	43.0		5.164		ND			
29 Bromochloromethane	128.0		5.460		ND			
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	52444	4.9559	4.9559	
31 Chloroform	83.0		5.567		ND			
33 1,1,1-Trichloroethane	97.0		5.815		ND			
32 Cyclohexane	56.0		5.886		ND			
34 Carbon Tetrachloride	117.0		6.028		ND			

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.001	18551	4.7098	4.7097	
\$ 36 Benzene-d6	84.0	6.253	6.253	0.012	112231	5.2713	5.2712	
37 Benzene	78.0		6.300		ND			
39 1,2-Dichloroethane	62.0		6.324		ND			
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	95559	5.0000	5.0000	
42 Trichloroethene	95.0		7.152		ND			
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	29862	5.0224	5.0224	
43 Methylcyclohexane	83.0		7.413		ND			
45 1,2-Dichloropropane	63.0		7.448		ND			
49 Bromodichloromethane	83.0		7.815		ND			
50 cis-1,3-Dichloropropene	75.0		8.383		ND			
51 4-Methyl-2-pentanone	43.0		8.643		ND			
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	86263	5.0485	5.0484	
53 Toluene	91.0		8.880		ND			
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	15176	4.8079	4.8079	
55 trans-1,3-Dichloropropene	75.0		9.188		ND			
56 1,1,2-Trichloroethane	97.0		9.412		ND			
57 Tetrachloroethene	164.0		9.590		ND			
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	19798	45.617	45.617	
60 2-Hexanone	43.0		9.732		ND			
61 Dibromochloromethane	129.0		9.874		ND			
62 1,2-Dibromoethane	107.0		9.992		ND			
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	65790	5.0000	5.0000	
64 Chlorobenzene	112.0		10.525		ND			
65 Ethylbenzene	91.0		10.631		ND			
67 m+p-Xylenes	106.0		10.749		ND			
68 o-Xylene	106.0		11.116		ND			
69 Styrene	104.0		11.128		ND			
70 Bromoform	173.0		11.294		ND			
71 Isopropylbenzene	105.0		11.448		ND			
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	10479	5.1115	5.1115	
74 1,1,2,2-Tetrachloroethane	83.0		11.708		ND			
83 1,3-Dichlorobenzene	146.0		12.465		ND			
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	29625	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0		12.536		ND			
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	23207	4.9655	4.9654	
89 1,2-Dichlorobenzene	146.0		12.808		ND			
90 1,2-Dibromo-3-chloropropane	75.0		13.365		ND			
91 1,2,4-Trichlorobenzene	180.0		13.944		ND			
94 1,2,3-Trichlorobenzene	180.0		13.944		ND			

QC Flag Legend

Review Flags

ND - User Disabled Compound Identification

Shealy Environmental Services, Inc.

Tentatively Identified Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A05.D
 Lab Sample ID: VBLKNI Client Sample ID: VBLKNI
 Injection Date: 04-Dec-2014 11:02:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VBLKNI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: BLANK ALS Bottle: 5
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:07:30

Tentative Identified Compound Results

RT	Response	Amount ug/L	Final Conc ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight
Quant. Compounds								
			RT	Response	Amount ug/L			

Shealy Environmental Services, Inc.

Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A05.D
 Lab Sample ID: VBLKNI Client Sample ID: VBLKNI
 Injection Date: 04-Dec-2014 11:02:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VBLKNI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: BLANK ALS Bottle: 5
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ccv Sample: /chem/msd8.i/8120414.b/81204A04.D
 Sample Type: VSTD005NI Sublist: std.sub
 Inject. Date: 04-Dec-2014 10:28:30 Cal Amount: 5.0000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	107183	64310	150056	95559	89.2
* 63 Chlorobenzene-d5	79380	47628	111132	65790	82.9
* 85 1,4-Dichlorobenzene-d4	36207	21725	50689	29625	81.8

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	0.003
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0.002
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0.002

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

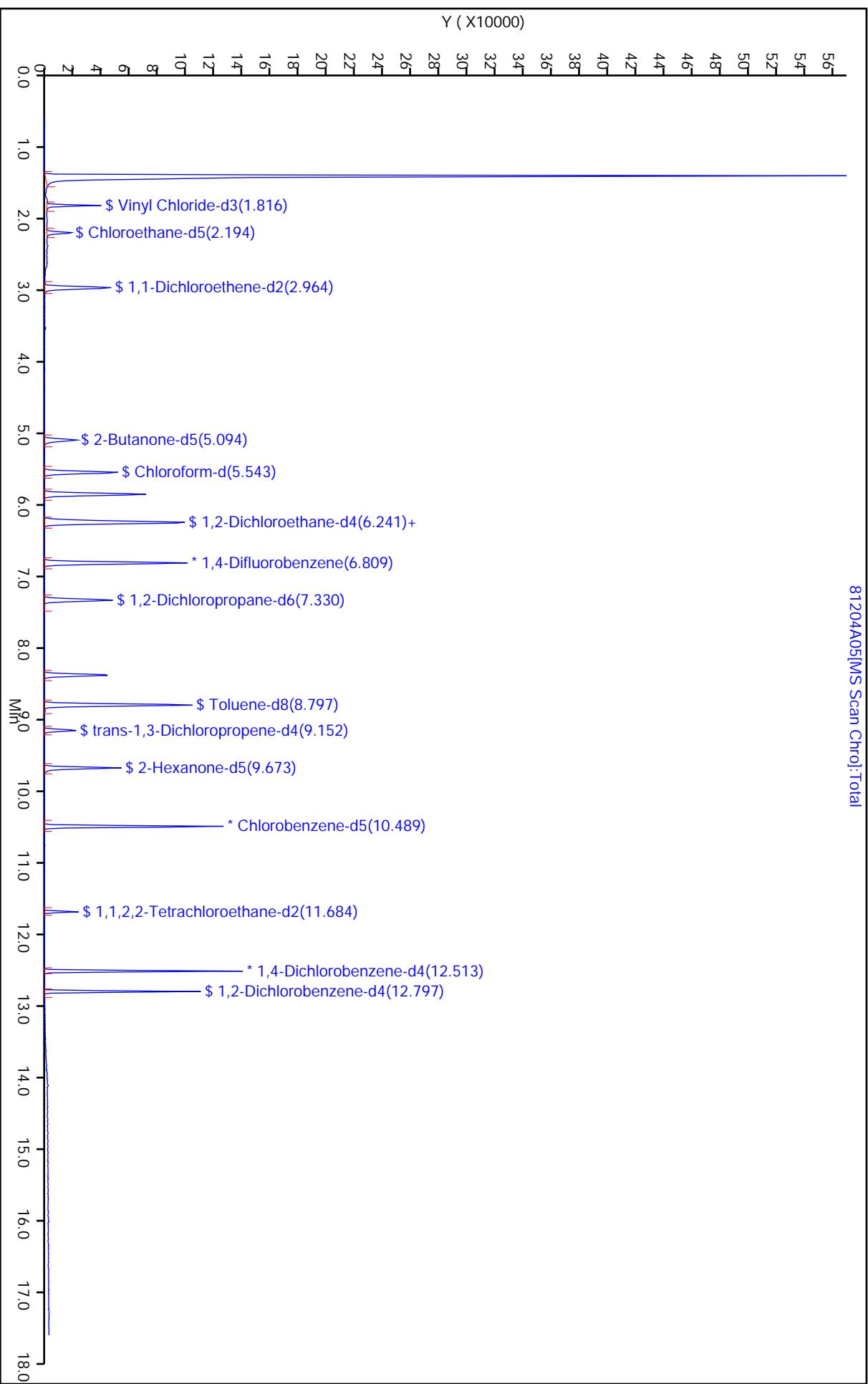
Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A05.D
 Lab Sample ID: VBLKNI Client Sample ID: VBLKNI
 Injection Date: 04-Dec-2014 11:02:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, VBLKNI
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: BLANK ALS Bottle: 5
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	5.4837	109.7	65- 131
\$ 6 Chloroethane-d5	5	5.4684	109.4	71- 131
\$ 12 1,1-Dichloroethene-d2	5	3.8248	76.5	55- 104
\$ 25 2-Butanone-d5	50	47.339	94.7	49- 155
\$ 30 Chloroform-d	5	4.9559	99.1	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.7097	94.2	78- 129
\$ 36 Benzene-d6	5	5.2712	105.4	77- 124
\$ 44 1,2-Dichloropropane-d6	5	5.0224	100.4	79- 124
\$ 52 Toluene-d8	5	5.0484	101	77- 121
\$ 54 trans-1,3-Dichloropropen	5	4.8079	96.2	73- 121
\$ 58 2-Hexanone-d5	50	45.617	91.2	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	5.1115	102.2	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.9654	99.3	80- 131

Report Date: 05-Dec-2014 08:20:00

AIM Revision: 1.0 31-Oct-2014 07:30:18



VHBLK01

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-003

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A18

Level: (TRACE/LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	0.50	U
74-87-3	Chloromethane	0.50	U
75-01-4	Vinyl chloride	0.50	U
74-83-9	Bromomethane	0.50	U
75-00-3	Chloroethane	0.50	U
75-69-4	Trichlorofluoromethane	0.50	U
75-35-4	1,1-Dichloroethene	0.50	U
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	0.50	U
67-64-1	Acetone	5.0	U
75-15-0	Carbon disulfide	0.50	U
79-20-9	Methyl acetate	0.50	U
75-09-2	Methylene chloride	0.50	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
1634-04-4	Methyl tert-Butyl Ether	0.50	U
75-34-3	1,1-Dichloroethane	0.50	U
156-59-2	cis-1,2-Dichloroethene	0.50	U
78-93-3	2-Butanone	5.0	U
74-97-5	Bromochloromethane	0.50	U
67-66-3	Chloroform	0.50	U
71-55-6	1,1,1-Trichloroethane	0.50	U
110-82-7	Cyclohexane	0.50	U
56-23-5	Carbon tetrachloride	0.50	U
71-43-2	Benzene	0.50	U
107-06-2	1,2-Dichloroethane	0.50	U

VHBLK01

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-003

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A18

Level: (TRACE/LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

Purge Volume: 25.0 (mL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
79-01-6	Trichloroethene	0.50	U
108-87-2	Methylcyclohexane	0.50	U
78-87-5	1,2-Dichloropropane	0.50	U
75-27-4	Bromodichloromethane	0.50	U
10061-01-5	cis-1,3-Dichloropropene	0.50	U
108-10-1	4-Methyl-2-pentanone	5.0	U
108-88-3	Toluene	0.50	U
10061-02-6	trans-1,3-Dichloropropene	0.50	U
79-00-5	1,1,2-Trichloroethane	0.50	U
127-18-4	Tetrachloroethene	0.50	U
591-78-6	2-Hexanone	5.0	U
124-48-1	Dibromochloromethane	0.50	U
106-93-4	1,2-Dibromoethane	0.50	U
108-90-7	Chlorobenzene	0.50	U
100-41-4	Ethylbenzene	0.50	U
95-47-6	o-Xylene	0.50	U
179601-23-1	m,p-Xylene	0.50	U
100-42-5	Styrene	0.50	U
75-25-2	Bromoform	0.50	U
98-82-8	Isopropylbenzene	0.50	U
79-34-5	1,1,2,2-Tetrachloroethane	0.50	U
541-73-1	1,3-Dichlorobenzene	0.50	U
106-46-7	1,4-Dichlorobenzene	0.50	U
95-50-1	1,2-Dichlorobenzene	0.50	U
96-12-8	1,2-Dibromo-3-chloropropane	0.50	U
120-82-1	1,2,4-Trichlorobenzene	0.50	U
87-61-6	1,2,3-Trichlorobenzene	0.50	U

1J - FORM I VOA-TIC
 VOLATILE ORGANICS ANALYSIS DATA SHEET
 TENTATIVELY IDENTIFIED COMPOUNDS

VHBLK01

Lab Name: Shealy Environmental Services, Inc.

Contract: EP-W-11-035

Lab Code: SHEALY Case No.: 44903

Mod. Ref No.: SDG No.: E5AZ2

Matrix: (SOIL/SED/WATER) Water

Lab Sample ID: PL03008-003

Sample wt/vol: 25.0 (g/mL) mL

Lab File ID: 81204A18

Level: (TRACE or LOW/MED) TRACE

Date Received:

% Moisture: not dec.

Date Analyzed: 12/04/2014

GC Column: DB-624 ID: 0.25 (mm)

Dilution Factor: 1.0

Soil Extract Volume: (uL)

Soil Aliquot Volume: (uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L

Purge Volume: 25.0 (mL)

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
01				
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
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17				
18				
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20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
E966796 ¹	Total Alkanes	N/A		

¹EPA-designated Registry Number.

Report Date: 05-Dec-2014 08:20:20

Shealy Environmental Services, Inc.

Target Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A18.D
 Lab Sample ID: PL03008-003 Client Sample ID: VHBLK01
 Injection Date: 04-Dec-2014 17:19:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-003,
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 18
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Data Reviewer: all

Detector: MS Scan

Review Date: 05-Dec-2014 08:15:30

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
1 Dichlorodifluoromethane	85.0		1.579		ND			
2 Chloromethane	50.0		1.721		ND			
\$ 3 Vinyl Chloride-d3	65.0	1.816	1.816	0.000	29686	4.9922	4.9922	
4 Vinyl Chloride	62.0		1.827		ND			
5 Bromomethane	94.0		2.135		ND			
\$ 6 Chloroethane-d5	69.0	2.194	2.194	0.000	17716	5.0373	5.0373	
7 Chloroethane	64.0		2.218		ND			
8 Trichlorofluoromethane	101.0		2.466		ND			
\$ 12 1,1-Dichloroethene-d2	63.0	2.964	2.964	-0.011	42765	3.5358	3.5358	
13 1,1-Dichloroethene	96.0		2.987		ND			
11 1,1,2-Trichloro-1,2,2-trifluo	101.0		2.987		ND			
14 Acetone	43.0		3.011		ND			
15 Carbon Disulfide	76.0		3.236		ND			
16 Methyl Acetate	43.0		3.401		ND			
17 Methylene Chloride	84.0		3.531		ND			
20 Methyl tert-Butyl Ether	73.0		3.875		ND			
21 trans-1,2-Dichloroethene	96.0		3.875		ND			
23 1,1-Dichloroethane	63.0		4.407		ND			
\$ 25 2-Butanone-d5	46.0	5.094	5.094	0.001	31796	38.758	38.758	
26 cis-1,2-Dichloroethene	96.0		5.152		ND			
28 2-Butanone	43.0		5.164		ND			
29 Bromochloromethane	128.0		5.460		ND			
\$ 30 Chloroform-d	84.0	5.543	5.543	0.000	49066	4.5134	4.5134	
31 Chloroform	83.0		5.567		ND			
33 1,1,1-Trichloroethane	97.0		5.815		ND			
32 Cyclohexane	56.0		5.886		ND			
34 Carbon Tetrachloride	117.0		6.028		ND			

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Response	OnCol Amt ug/L	Final Conc ug/L	Flags
\$ 38 1,2-Dichloroethane-d4	65.0	6.218	6.218	0.001	18252	4.5107	4.5106	
\$ 36 Benzene-d6	84.0	6.241	6.241	0.000	107682	4.7213	4.7213	
37 Benzene	78.0		6.300		ND			
39 1,2-Dichloroethane	62.0		6.324		ND			
* 41 1,4-Difluorobenzene	114.0	6.809	6.809	0.000	98169	5.0000	5.0000	
42 Trichloroethene	95.0		7.152		ND			
\$ 44 1,2-Dichloropropane-d6	67.0	7.330	7.330	0.000	30146	4.7331	4.7330	
43 Methylcyclohexane	83.0		7.413		ND			
45 1,2-Dichloropropane	63.0		7.448		ND			
49 Bromodichloromethane	83.0		7.815		ND			
50 cis-1,3-Dichloropropene	75.0		8.371		ND			
51 4-Methyl-2-pentanone	43.0		8.643		ND			
\$ 52 Toluene-d8	98.0	8.797	8.797	0.000	85426	4.6671	4.6670	
53 Toluene	91.0		8.880		ND			
\$ 54 trans-1,3-Dichloropropene-d4	79.0	9.152	9.152	0.000	16191	4.7884	4.7884	
55 trans-1,3-Dichloropropene	75.0		9.188		ND			
56 1,1,2-Trichloroethane	97.0		9.412		ND			
57 Tetrachloroethene	164.0		9.590		ND			
\$ 58 2-Hexanone-d5	63.0	9.673	9.673	0.000	19399	41.726	41.726	
60 2-Hexanone	43.0		9.732		ND			
61 Dibromochloromethane	129.0		9.874		ND			
62 1,2-Dibromoethane	107.0		9.992		ND			
* 63 Chlorobenzene-d5	117.0	10.489	10.489	0.000	70476	5.0000	5.0000	
64 Chlorobenzene	112.0		10.525		ND			
65 Ethylbenzene	91.0		10.631		ND			
67 m+p-Xylenes	106.0		10.749		ND			
68 o-Xylene	106.0		11.116		ND			
69 Styrene	104.0		11.128		ND			
70 Bromoform	173.0		11.294		ND			
71 Isopropylbenzene	105.0		11.448		ND			
\$ 72 1,1,2,2-Tetrachloroethane-d2	84.0	11.684	11.684	0.000	10834	4.9333	4.9332	
74 1,1,2,2-Tetrachloroethane	83.0		11.708		ND			
83 1,3-Dichlorobenzene	146.0		12.465		ND			
* 85 1,4-Dichlorobenzene-d4	152.0	12.513	12.513	0.000	29298	5.0000	5.0000	
86 1,4-Dichlorobenzene	146.0		12.536		ND			
\$ 87 1,2-Dichlorobenzene-d4	152.0	12.797	12.797	0.000	22901	4.9547	4.9546	
89 1,2-Dichlorobenzene	146.0		12.808		ND			
90 1,2-Dibromo-3-chloropropane	75.0		13.365		ND			
91 1,2,4-Trichlorobenzene	180.0		13.944		ND			
94 1,2,3-Trichlorobenzene	180.0		13.944		ND			

QC Flag Legend

Review Flags

ND - User Disabled Compound Identification

Shealy Environmental Services, Inc.

Tentatively Identified Compound Quantitation Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A18.D
 Lab Sample ID: PL03008-003 Client Sample ID: VHBLK01
 Injection Date: 04-Dec-2014 17:19:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-003,
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 18
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Concentration Formula: Amt * DF * 25/Vo * CpndVariable

Name	Value	Description
DF	1.0000	Dilution Factor
Vo	25.000	Purge Volume in ML
Cpnd Variable		Local Cpnd Variable

Column1: DB-624 (0.25 mm)

Detector: MS Scan

Data Reviewer: all

Review Date: 05-Dec-2014 08:15:30

Tentative Identified Compound Results

RT	Response	Amount ug/L	Final Conc ug/L	Quant Cpnd	Qual	Lib Entry	Molecular Formula	Mol. Weight
Quant. Compounds								
			RT	Response	Amount ug/L			

Shealy Environmental Services, Inc.
Internal Standard Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A18.D
 Lab Sample ID: PL03008-003 Client Sample ID: VHBLK01
 Injection Date: 04-Dec-2014 17:19:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-003,
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 18
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon

Istd Ccv Sample: /chem/msd8.i/8120414.b/81204A04.D
 Sample Type: VSTD005NI Sublist: std.sub
 Inject. Date: 04-Dec-2014 10:28:30 Cal Amount: 5.0000

Compound	Standard	Lower Limit	Upper Limit	Sample	% Rec
* 41 1,4-Difluorobenzene	107183	64310	150056	98169	91.6
* 63 Chlorobenzene-d5	79380	47628	111132	70476	88.8
* 85 1,4-Dichlorobenzene-d4	36207	21725	50689	29298	80.9

Compound	Standard	Lower Limit	Upper Limit	Sample	DLT(min.)	% Diff
* 41 1,4-Difluorobenzene	6.809	6.479	7.139	6.809	0	0.003
* 63 Chlorobenzene-d5	10.489	10.159	10.819	10.489	0	0.002
* 85 1,4-Dichlorobenzene-d4	12.513	12.183	12.843	12.513	0	0.001

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = + 0.33 minutes of internal standard RT.

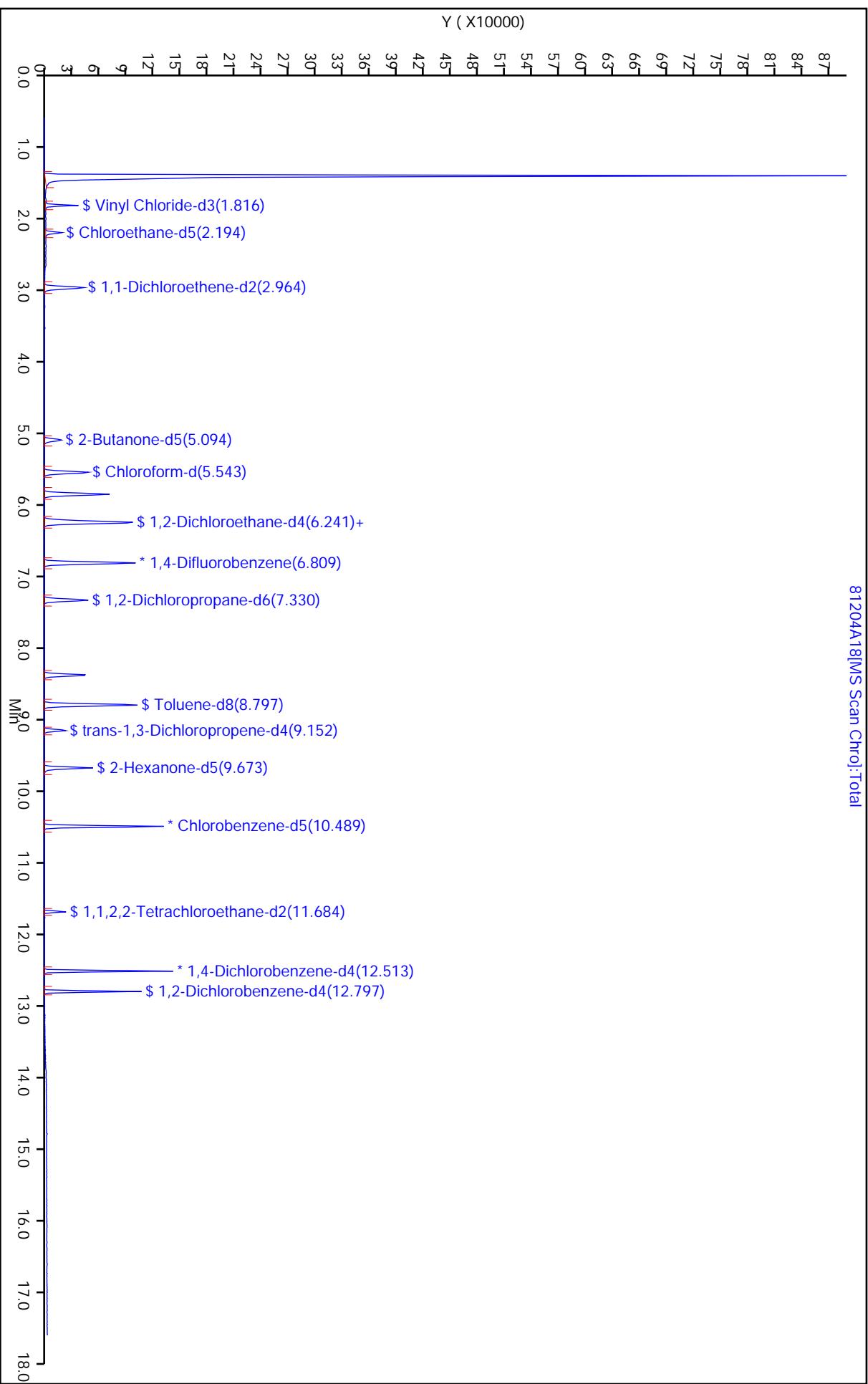
RT LOWER LIMIT = - 0.33 minutes of internal standard RT.

Shealy Environmental Services, Inc.

Surrogate Recovery Report

Data File: \\Organics\DD\chem\msd8.i\8120414.b\81204A18.D
 Lab Sample ID: PL03008-003 Client Sample ID: VHBLK01
 Injection Date: 04-Dec-2014 17:19:30 Dil. Factor: 1.0
 Operator: ALL Inst. ID: msd8.i
 Sample Info: 8120414.b, PL03008-003,
 Method: \\Organics\DD\chem\msd8.i\8120414.b\TRACE-8.m
 Method Date: 04-Dec-2014 10:47:30 Quant Method: ISTD
 Calib Date: 03-Dec-2014 01:53:30 Calib File: 81202D06.D
 Sample Type: Client ALS Bottle: 18
 Cpnd Sublist: std.sub
 Sample Matrix: Water Matrix Level: Low
 Target 4.14 Integrator: falcon
 Column1: DB-624 (0.25 mm) Detector: MS Scan

Compound	Amount Added	Amount Detected	%Rec	%Rec Limits
\$ 3 Vinyl Chloride-d3	5	4.9922	99.8	65- 131
\$ 6 Chloroethane-d5	5	5.0373	100.7	71- 131
\$ 12 1,1-Dichloroethene-d2	5	3.5358	70.7	55- 104
\$ 25 2-Butanone-d5	50	38.758	77.5	49- 155
\$ 30 Chloroform-d	5	4.5134	90.3	78- 121
\$ 38 1,2-Dichloroethane-d4	5	4.5106	90.2	78- 129
\$ 36 Benzene-d6	5	4.7213	94.4	77- 124
\$ 44 1,2-Dichloropropane-d6	5	4.733	94.7	79- 124
\$ 52 Toluene-d8	5	4.667	93.3	77- 121
\$ 54 trans-1,3-Dichloropropen	5	4.7884	95.8	73- 121
\$ 58 2-Hexanone-d5	50	41.726	83.5	28- 135
\$ 72 1,1,2,2-Tetrachloroethan	5	4.9332	98.7	73- 125
\$ 87 1,2-Dichlorobenzene-d4	5	4.9546	99.1	80- 131



K. Miscellaneous Data

Run logs

Standard Preparation Logs

Extraction Preparation Logs (if applicable)

Sample Weight logs (if applicable)

Percent Moisture Logs (if applicable)

Internal Chain-of-Custody (if applicable)

Airbills (Original)

Traffic Report/Chain-of-custody (Original)

DC-1 (Original)

Other records

Shealy Environmental Services, Inc
Document Number: F-VO-026

Revision Number: 12

Page 1 of 1
Replaced Date: 03/25/111
Effective Date: 04/16/13

Batch #: _____

GC/MS VOA Instrument Run Log MSD #8

12/2/14

ICRU

621016

Analyst: Aff

Prep Analyst: JLG

Analytical Method: 8260B / 624 / CLP / Other Trace

Prep Method: 5030B / 5035 / 3580 / Other _____

1 μL of IS # 13732 into 25 mL to 75 μL of SS# 16528 into 43 mL \times Purge Volume = 5 / 10 / 25 mL

Seq #	File Name	Sample Lot #	Sublist	DF	pH	Chlorine Present? Y/N	Matrix	Spike $\mu\text{L}/\text{mL}$	PASS / FAIL	Comments
1	81202D 01	BFBMV	BFB	1x	NA	NA	A	2uL	P	131097
2	02	VSTD020MV	STD					NA		6558
3	03	VSTD0010MV								6557
4	04	VSTD005MV								6556
5	05	VSTD001MV								6555
6	06	VSTD0.5MV								6554
7	07	VRBLK								
8										
9										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
34										<u>Aff 12/2/14</u>

Nealy Environmental Services, Inc.
Document Number: F-VO-026
Revision Number: 12

Page 1 of 1
Replaced Date: 03/25/111
Effective Date: 04/16/13

GC/MS VOA Instrument Run Log MSD #8

Batch #: 62321

Date: 12/4/14

62106

Analyst: Off

Prep Analyst: Off

Analytical Method: 8260B / 624 / CLP Other Trace

Prep Method: 5030B / 5035 / 3580 / Other

μL of IS # 13732

into 25 mL 10.7 μL of SS#

6528

into 43 mL

Purge Volume = 5 / 10 / 25 mL

Seq #	File Name	Sample Lot #	Sublist	DF	pH	Chlorine Present? Y/N	Matrix	Spike μL/mL	PASS / FAIL	Comments
1	81204 AV	BFB N1	BFB	1	NA	NA	A	2mL	P	
2	02	VIBLK	STD	1				NA	L	B697 (0906)
3	03	VST0005		1					F	
4	04	VST0005N1		1					P	6560
5	05	VBLK N1		1						
6	06	PL03008-001		1	2					
7	07	1 002		1	5					
8	08	PL03028-008		1	5					
9	09	009		1						
10	10	001		1						
11	11	002		1						
12	12	003		1						
13	13	004		1						
14	14	005		1						
15	15	006		1						
16	16	007		20	5					
17	17	007		1	5					
18	18	PL03008-003		1	52					
19	19	1 003		1	1					PL03028-010
20	20	VST0005 NL		1	NA					6560
21	21	VST0005 NL		1	1					NR
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										
33										
4										

Off 12/4/14

= Reanalyze E = Exceeds Cal Range L = Lesser dilution required I = IS Failure S = Surrogate Failure NA = Not Analyzed C = Confirms NR = Not Reported
 = Carry Over NC = Not Clean Matrix: Aqueous/Low Level Soil (5035)/Methanol, High Level Soil/Non-Aqueous Liquid RC = Rerun Clean P = Pass F = Fail
 61 of 100

**Working Standard Prep Log - Volatiles
 (Aqueous CLP)**

Standard ID: SOMV 6558

Analyst:	JJG
Solv. Lot:	NA

Prep Date:	12/2/2014
Exp. Date:	12/3/2014

Stock Standard	Shealy ID	Stock Conc (ug/ml)	Init. Vol. (ul)	Final Vol. (ml)	Final Conc. (ug/L)	Solvent	Mfg. Exp. Date	Ampule Opened	Ampule Exp. Date
Trace ICAL 20									
SOM Trace Ketone Std	SOMV 6445	800	10	50	160	H2O	NA	11/13/2014	12/13/2014
8260 Sec. Std	VOMS 13744	100	10	50	20	H2O	NA	11/26/2014	12/8/2014
8260 Sec. Gas Std	VOMS 13742	100	10	50	20	H2O	NA	11/25/2014	12/2/2014
Trace DMC Mix	SOMV 6528	20	50	50	20	H2O	NA	11/22/2014	12/22/2014
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-

*Refer to COA for specific compound concentrations for mixed standards.

**Working Standard Prep Log - Volatiles
 (Aqueous CLP)**

Standard ID: SOMV 6557

Analyst:	JJG
Solv. Lot:	NA

Prep Date:	12/2/2014
Exp. Date:	12/3/2014

Stock Standard	Shealy ID	Stock Conc (ug/ml)	Init. Vol. (ul)	Final Vol. (ml)	Final Conc. (ug/L)	Solvent	Mfg. Exp. Date	Ampule Opened	Ampule Exp. Date
Trace ICAL 10									
SOM Trace Ketone Std	SOMV 6445	800	5	50	80	H2O	NA	11/13/2014	12/13/2014
8260 Sec. Std	VOMS 13744	100	5	50	10	H2O	NA	11/26/2014	12/8/2014
8260 Sec. Gas Std	VOMS 13742	100	5	50	10	H2O	NA	11/25/2014	12/2/2014
Trace DMC Mix	SOMV 6528	20	25	50	10	H2O	NA	11/22/2014	12/22/2014
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-

*Refer to COA for specific compound concentrations for mixed standards.

**Working Standard Prep Log - Volatiles
 (Aqueous CLP)**

Standard ID: SOMV 6556

Analyst:	JJG
Solv. Lot:	NA

Prep Date:	12/2/2014
Exp. Date:	12/3/2014

Stock Standard	Shealy ID	Stock Conc (ug/ml)	Init. Vol. (ul)	Final Vol. (ml)	Final Conc. (ug/L)	Solvent	Mfg. Exp. Date	Ampule Opened	Ampule Exp. Date
Trace ICAL 5									
SOM Trace Ketone Std	SOMV 6445	800	5	100	40	H2O	NA	11/13/2014	12/13/2014
8260 Sec. Std	VOMS 13744	100	5	100	5	H2O	NA	11/26/2014	12/8/2014
8260 Sec. Gas Std	VOMS 13742	100	5	100	5	H2O	NA	11/25/2014	12/2/2014
Trace DMC Mix	SOMV 6528	20	25	100	5	H2O	NA	11/22/2014	12/22/2014
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-

*Refer to COA for specific compound concentrations for mixed standards.

**Working Standard Prep Log - Volatiles
 (Aqueous CLP)**

Standard ID: SOMV 6555

Analyst:	JJG
Solv. Lot:	NA

Prep Date:	12/2/2014
Exp. Date:	12/3/2014

Stock Standard	Shealy ID	Stock Conc (ug/ml)	Init. Vol. (ul)	Final Vol. (ml)	Final Conc. (ug/L)	Solvent	Mfg. Exp. Date	Ampule Opened	Ampule Exp. Date
Trace ICAL 1									
SOM Trace Ketone Std	SOMV 6445	800	5	500	8	H2O	NA	11/13/2014	12/13/2014
8260 Sec. Std	VOMS 13744	100	5	500	1	H2O	NA	11/26/2014	12/8/2014
8260 Sec. Gas Std	VOMS 13742	100	5	500	1	H2O	NA	11/25/2014	12/2/2014
Trace DMC Mix	SOMV 6528	20	25	500	1	H2O	NA	11/22/2014	12/22/2014
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-
-	-	1000	10	100	100	-	-	-	-

*Refer to COA for specific compound concentrations for mixed standards.

Working Standard Prep Log - Volatiles (Aqueous CLP)

Standard ID: SOMV 6554

Analyst: JJG
Solv. Lot: NA

Prep Date: 12/2/2014
Exp. Date: 12/3/2014

*Refer to COA for specific compound concentrations for mixed standards.

Working Standard Prep Log - Volatiles (Aqueous CLP)

Standard ID: VOMS 6560

Analyst: ALL
Solv. Lot: NA

Prep Date: 12/4/2014
Exp. Date: 12/5/2014

*Refer to COA for specific compound concentrations for mixed standards.

Shealy Environmental Services, Inc.
Document Number: F-VO-010
Revision Number: 1

Page 1 of 1
Replaces Date: 01/01/02
Effective Date: 01/14/03

Volatile Internal Chain of Custody - CLP

Date	Time	Analyst	From	To	Lab Sample ID	Container #	Consumed Y/N
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03008-001	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03008-002	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-001	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-002	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-003	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-004	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-005	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-006	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-007	2	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-007	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03008-003	1	Y
12/4/2014	9:00	ALL	Refrigerator 18	MSD-8	PL03028-010	1	Y

00072 **2/11/92**

FedEx® NEW Package US Airbill

00100 FedEx Tracking Number **899270028620**

1 From
Date 12/2/91 **FedEx Tracking Number** 899270028620
Sender's Name Keith Hughes **Phone** 317 351-4255

Company CIVIL LIABILITY ENVIRONMENTAL PROFE
Address 1611 S FRANKLIN RD

City INDIANAPOLIS **State** IN **ZIP** 46239-1196 **Dept/Room/Suite/Rm**

2 Your Internal Billing Reference

3 To
Recipient's Name Robert Zhu **Phone** 803 791-1700
Company Shealy Environmental Services
Address 106 Vantage Port Drive **Dept/Room/Suite/Rm**

HOLD/Weekday FedEx location address
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REQUIRED NOT available for FedEx First Overnight and FedEx 2Day Air service.
 FedEx Saturday delivery only for FedEx 2Day Air service locations.

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 Saturday Delivery NOT available.

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One box must be checked. Yes As per attached. Shipper's Declaration
 No Same as recipient's address. Dangerous goods including items that cannot be shipped in FedEx packaging or placed in a FedEx Express Drop Box.

Indirect Signature If package is to be delivered to a recipient's address other than the shipping address, sign for delivery at a neighboring residential deliveries only. Fee applies.

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7 Payment Bill to:
Recipient Enter FedEx Acct. No. or Credit Card No. below. _____
Acct. No. / Section _____ **Recipient** Third Party Credit Card Cash/Check
Total Packages 1 **Total Weight** 1 lbs. **Credit Card Auth.** _____

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0215 **MUR1** **Recipients Copy**

L **611**

899270028620

E5A.Z2

USEPA
DateShipped
CarrierName
AirbillNo: 88

USEPA
DateShipped: 12/2/2014
CarrierName: FedEx
AirbillNo: 899270028620

CHAIN OF CUSTODY RECORD

West Vermont
Contact Name: Kevin
Contact Phone: 332-201

No: 5-120214-143219-0008
Case #: 44903
Lab: Shealy Environmental Services
Lab Phone: 803-791-9700

Lab Phone: 803-791-9700

<p>SAMPLES TRANSFERRED FROM</p> <p>CHAIN OF CUSTODY #</p>
<p>Special Instructions:</p>

SAMPLE LOG-IN SHEET
FORM DC-1

Lab Name Shealy Environmental Services, Inc.		Page <u>1</u> of <u>1</u>		
Received By (Print Name)	Kelly W Price			
Received By (Signature)	<i>Kelly W Price</i>			
Case Number	Sample Delivery Group No.	Mod. Ref. No.		
Remarks:		Corresponding		
1. Custody Seal(s)	EPA Sample #	Sample Tag #	Assigned Lab #	Remarks: Condition of Sample Shipment, etc.
<u>Present/Absent*</u> <u>Intact/Broken</u>	E5A22	45045	PL03008-001	OK
2. Custody Seal Nos.	E5A23	45046	PL03008-002	OK
3. Traffic Reports/ Chain of Custody Records (TR/COCs) or Packing Lists				
4. Airbill				
5. Airbill No.				
6. Sample Tags				
Sample Tag Numbers	<u>Listed</u> Not Listed on Chain-of- Custody			
7. Sample Condition	<u>Intact</u> <u>Broken*</u> / Leaking			
8. Cooler Temperature Indicator Bottle	<u>Present/Absent*</u> KUP 12-3-14			
9. Cooler Temperature	5.3°			
10. Does information on TR/COCs and sample tags agree?	<u>Yes</u> /No*			
11. Date Received at Laboratory	12-3-14			
12. Time Received	1030			
Sample Transfer				
Fraction VOC	Fraction			
Area # Fridge	Area #			
By Kelly W	By			
On 17-3-14	On			

* Contact SMO and attach record of resolution.

Reviewed By <i>W</i>	Logbook No. <i>WT</i>
Date 12/3/14	Logbook Page No. <i>WT</i>

Robert Zhu

From: Dean, Whitlee <wdean9@fedcsc.com>
Sent: Wednesday, December 17, 2014 4:33 PM
To: Robert Zhu
Cc: Alida Roberman; Carlene Thomas; Howard Pham; Tim Prendiville; Layne.warren@epa.gov; kevin.scott@tetrtech.com
Subject: Region 05 | Case 44903 | Lab SHEALY | Issue Insufficient/inappropriate designation of laboratory QC | FINAL
Attachments: Case 44903_SDG E5AZ2_Cover Sheet.pdf

Good afternoon,

Issue: The laboratory received three vials for each of the two samples in this SDG. This Case requires laboratory QC. However the laboratory has insufficient volume to perform laboratory QC, even at a reduced volume as one vial will be used for screening and one vial will be used for the analysis.

Resolution: Per Region 5, the laboratory will forego laboratory QC on these samples. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Please let me know if you have any questions or problems. To waive any defect(s) associated with this issue, please contact your PO.

Thanks,

WHITLEE DEAN
Environmental Coordinator- Regions 3 and 5
CSC

We are in the process of migrating from MS Outlook to Lotus Notes. Outlook accounts will become inactive on January 15, 2015. You may continue to reach me at wdean9@csc.com.

15000 Conference Center Drive, Chantilly, VA 20151
Civil Division | t: 703-818-4367 | f: 703-818-4602 | wdean9@fedcsc.com | www.csc.com

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From: Layne, Warren [mailto:layne.warren@epa.gov]
Sent: Wednesday, December 17, 2014 4:27 PM
To: Dean, Whitlee
Subject: RE: Region 05 | Case 44903 | Lab SHEALY | Issue Insufficient/inappropriate designation of laboratory QC

The region agrees with the solution.

From: Dean, Whitlee [<mailto:wdean9@fedcsc.com>]
Sent: Wednesday, December 17, 2014 3:25 PM
To: Layne, Warren
Cc: Roberman, Alida; Thomas, Carlene; Pham, Howard; Prendiville, Timothy
Subject: RE: Region 05 | Case 44903 | Lab SHEALY | Issue Insufficient/inappropriate designation of laboratory QC

Hi Warren,

Please advise if the proposed resolution is acceptable. The sampler has advised that they have laboratory QC data for other samples in this Case already.

Issue: The laboratory received three vials for each of the two samples in this SDG. This Case requires laboratory QC. However the laboratory has insufficient volume to perform laboratory QC, even at a reduced volume as one vial will be used for screening and one vial will be used for the analysis.

PROPOSED Resolution: Per Region 5, the laboratory will forego laboratory QC on these samples. Please note the issue in the SDG Narrative and proceed with the analysis of the samples.

Please let me know if you have any questions.

Thanks,

WHITLEE DEAN
Environmental Coordinator- Regions 3 and 5
CSC

We are in the process of migrating from MS Outlook to Lotus Notes. Outlook accounts will become inactive on January 15, 2015. You may continue to reach me at wdean9@csc.com.

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From: Scott, Kevin [<mailto:Kevin.Scott@tetrtech.com>]
Sent: Wednesday, December 17, 2014 4:19 PM
To: Dean, Whitlee
Cc: Alida Roberman; Carlene Thomas; Howard Pham; Tim Prendiville; Layne.warren@epa.gov
Subject: RE: Region 05 | Case 44903 | Lab SHEALY | Issue Insufficient/inappropriate designation of laboratory QC

Hi Dean,

Please instruct the lab to forgo performing laboratory QC on these samples. we have laboratory QC data for other samples in this case. thx.

Kevin

From: Dean, Whitlee [<mailto:wdean9@fedcsc.com>]

Sent: Wednesday, December 17, 2014 3:03 PM

To: Scott, Kevin

Cc: Alida Roberman; Carlene Thomas; Howard Pham; Tim Prendiville; Layne.warren@epa.gov

Subject: Region 05 | Case 44903 | Lab SHEALY | Issue Insufficient/inappropriate designation of laboratory QC

Good afternoon,

SHEALY is reporting the following issue. Please advise how the laboratory should proceed.

Issue: The laboratory received three vials for each of the two samples in this SDG. This Case requires laboratory QC. However the laboratory has insufficient volume to perform laboratory QC, even at a reduced volume as one vial will be used for screening and one vial will be used for the analysis.

Please let me know if you have any questions.

Thanks,

WHITLEE DEAN

Environmental Coordinator- Regions 3 and 5

CSC

We are in the process of migrating from MS Outlook to Lotus Notes. Outlook accounts will become inactive on January 15, 2015. You may continue to reach me at wdean9@csc.com.

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Civil Division | t: 703-818-4367 | f: 703-818-4602 | wdean9@fedcsc.com | www.csc.com

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From: Robert Zhu [<mailto:rzhuz@shealylab.com>]

Sent: Wednesday, December 17, 2014 3:55 PM

To: Dean, Whitlee

Subject: Case 44903

Whittlee,

The lab received 3 vials each for the two samples in this SDG. This case requires lab QC, however, with one vial used for screening and one for analysis, there is insufficient volume of sample to perform lab QC, even at reduced volume.

Thanks,

Robert Zhu
Technical Director
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rzhu@shealylab.com
www.shealylab.com

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